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G20 Osaka Summit Special

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G20 host has work cut out for it in creating consensus

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One of the largest and most important gatherings of world leaders outside the U.N. General Assembly — the Group of 20 Leaders' Summit — arrives in Japan for the first time ever this week, bringing with it over 30 presidents, prime ministers and leaders from international organizations. Some 30,000 participants, including U.S. President Donald Trump and Chinese President Xi Jinping, are expected to come to Osaka for the two-day meeting from Friday. Under the G20 process, Japan, as host nation, sets the agenda for discussions on specific economic and financial issues, as well as social and environmental matters that will range this year from health and

women's empowerment to climate change and dealing with marine plastic waste. The impetus for the current G20 Summit was the global financial meltdown in 2008, when the leaders gathered to discuss how to prevent a similar crisis from happening again. And over the course of the years, the agenda has been broadened to include a more wide-ranging set of concerns and topics. All G20 commitments are voluntary and not legally binding. But they serve as an indicator of the general policy direction of the member states on specific issues such as investing in developing countries, which energy sources are likely to be targeted for future development, what future investment opportunities might open up or expand in member states and what kinds of political decisions might be taken, in a

broad sense. For Japan, hosting this year's G20 has proved to be a challenge. Normally, the host country has at least a full year between summits to prepare and work to get 20 countries — with their very different political and socioeconomic systems — to agree on the issues. But last year's G20 Summit held in Buenos Aires was just over six months ago. In addition, the enthronement of the new emperor on May 1 monopolized much of the government's attention, leaving questions about whether there has been enough time to reach substantive agreements on the agenda issues. For this year, trade conflicts between the U.S. and China will be the hot topic as well as concerns that rising protectionist sentiment continues to pose a threat to growth in global trade. "One of the most urgent tasks facing the G20 members is to regain confidence in the multilateral trading system, given the fact that trade tensions have started to weigh heavily on the prospects of growth," Koji Tomita, the Japanese government representative for the G20 Summit, wrote in a personal commentary published on May 10 on the Association of Japanese Institutes of Strategic Studies website. "Representing 80 percent of the global economy, the G20 members have to assume special responsibility by keeping their markets open," he added. One of the ways Japan hopes to restore international trust in multilateral trade is to win G20 approval for reform of the World Trade Organization in order to allow it to function better in areas like e-commerce, and that's high on the agenda in Japan's traditional commercial center of Osaka.

Another key topic will be how to deal with the global economy at a time of uncertain progress due to the rapid introduction of transformative technologies like the "internet of things" and artificial intelligence, Tomita said. Other issues for discussion include women's empowerment, which Tomita called a "key priority" on the agenda. Related to this is another priority for Japan, which is G20 efforts to address those member states' whose populations, like Japan's, are aging and declining. With the G20 Ministerial Meeting on Energy Transitions and Global Environment for Sustainable Growth, which took place earlier this month, having agreed to a framework on how best to deal with the problem of marine plastic waste, such as the collecting and sharing of data, one of Japan's major priority items will be to get a firm commitment from G20 leaders on moving forward on the issue. A recent government survey showed plastic waste was the top concern for respondents. Then there are issues that could prove quite politically controversial for some participants. This includes "quality infrastructure" investment, which generally refers to investments made by developed nations into developing countries. The investments include funding for such things as energy, agricultural and large-scale transportation or public works projects, which require a need for high levels of transparency, efficiency and accountability. One of the reasons for concern about this issue is related to China's "Belt and Road" initiative, the projects it is funding, and growing criticism that the projects being pursued are wasting money, have insufficient financial transparency, and are not benefiting the local populations for which they are supposedly intended to help. With China a member of the G20, how other nations handle the discussions in Osaka on new standards for quality infrastructure so that a unanimous agreement is reached will be a crucial task for Japan. Another issue likely to be particularly sensitive is that of climate change, which Tomita said was one of the key challenges for Japan because past G20 meetings have failed to come to unanimous agreements on what the group should do.

He called for "pragmatic" debates on the issue, though whether G20 members like the U.S., which decided to withdraw from the 2015 Paris agreement on climate change, would agree on Japan's, and the world's, definition of "pragmatic" remains to be seen. Finally, there is an issue first raised by Prime Minister Shinzo Abe at the World Economic Forum meeting in Davos, Switzerland, earlier this year, which is that of global data governance. Worried that developments in cyberspace are widening the digital divide and the pace at which the virtual world is changing and merging with the physical world in the form of advanced artificial intelligence, Abe said he wanted to at least get the G20 to encourage debate on the issues involved. This has proved to be extremely controversial, though, with the U.S., the European Union, and nations like China all having very different ideas on what should, or should not, be done. Meanwhile, nongovernment actors, including members of civil society as well as industry experts, have raised concerns about the implications from everything from privacy violations to data protection to the effect on e-commerce, an issue Tomita addressed. "Although this may not be an easy undertaking, the matter is serious enough to merit the attention of world leaders, and Osaka could catalyze deeper and intensified global discussion in this area, including through creating strong momentum for the negotiation on electronic commerce within the framework of the WTO," he wrote. These are some of the main agenda items expected to receive much political and international media attention. How much attention, though, could well depend on whether a sudden major political or financial crisis on the eve of the Osaka summit forces leaders to make a response. Dealing with armed conflict between the U.S. and Iran, or even political pressure by other G20 members on China over demonstrators in Hong Kong, are two examples where the G20 could find itself forced to shorten discussions on a prearranged agenda. With nearly a year and a half to go before the 2020 G20 Summit in Saudi Arabia, this

year's summit is expected to set the tone for next year's discussions, which will take place in November, after the U.S. presidential election. The Osaka summit thus offers Japan an opportunity to think farther into the future than might ordinarily be the case, and to help stimulate the other G20 members to do the same on issues that will continue to impact the economies, and the lives, of not only the 20 member states but the world at large.

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profiles of G20 leaders

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The following are profiles of leaders of the participants making up the Group of 20 major economies. This year's G20 Summit will take place in Osaka, on June 28 and 29.

Argentina

President Mauricio Macri

Macri is aiming for his second term in the presidential election expected in October, but is likely to face an uphill battle amid Argentina's economic woes. Inflation was nearly 50 percent in 2018 and the country's currency, the peso, has been heavily devalued, sapping households of spending power.

The 60-year-old leader is the son of a prominent Italian-born industrialist and was brought up in the family business. He studied civil engineering at university and



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served as a senior official in various construction concerns and other companies.

In 1991, he was kidnapped by rogue police officers and was held for nearly two weeks until his family paid his ransom, an experience that purportedly led him to pursue a career in politics.

Macri later became head of the Boca Juniors, one of the country's most popular soccer teams, before being elected mayor of Buenos Aires in 2007. He has been president since 2015 and was the host of last year's G20 Summit in the Argentine capital.

A big fan of Freddie Mercury, he has sometimes impersonated the late Queen singer.

Australia

Prime Minister Scott Morrison

Morrison will arrive in Japan for the first time to attend the G20 Summit, having come to office last August and winning the country's general election on May 18.

His Liberal Party and coalition partner National Party performed better than media predictions in the election to take the country's conservative government



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into its third consecutive term.

Morrison campaigned on a policy of fiscally responsible action on climate change, rejecting proposals to increase renewable energy on the grounds it would damage mining exports and drive up electricity prices.

The 51-year-old became Australia's seventh prime minister in 11 years after he replaced former Prime Minister Malcolm Turnbull.

Well-known for his nickname "ScoMo," Morrison is a graduate of the University of New South Wales.

He is a Protestant and first met his wife Jenny when they were attending church as teenagers.

Brazil

President Jair Bolsonaro

Retired military officer Bolsonaro took office in January, with a promise to crack down on crime and ease gun control laws so that ordinary people could defend themselves.

The 64-year-old politician is known for supporting national conservatism.

He also expressed skepticism about Chinese investment in Brazil during last year's election campaign, much of which he was forced to sit out after being hospitalized by a life-threatening stab wound to the abdomen in September.

Hailing from Sao Paulo, he graduated from a military academy and joined a



REUTERS / VIA KYODO

paratrooper brigade. He decided to pursue a political career after being disciplined for writing a column in a local magazine in 1986 advocating for increased military salaries.

He served as a lower house member for seven consecutive terms from 1991 before being elected president.

A Catholic with the middle name Mesias, meaning "savior," he has called the presidential post his mission from God.

Canada

Prime Minister Justin Trudeau

This will be Trudeau's fifth G20 Summit after taking power following his Liberal Party's victory in October 2015.

Trudeau was born in Ottawa on Christmas Day in 1971 to then-Prime Minister Pierre Elliott Trudeau. From very early in his life, he has been in the public eye.

The 47-year-old graduated from McGill University in 1994 with a Bachelor of Arts



UPI / VIA KYODO

degree in literature and continued on to complete a Bachelor of Education degree at the University of British Columbia. He then spent several years teaching French and math among other subjects.

After his younger brother died in an avalanche while skiing in 1998, Trudeau became involved in promoting avalanche safety.

The telegenic prime minister entered politics in 2007. He was elected leader of the Liberal Party in April 2013, and attracted support particularly from younger voters with his call for respecting diversity and ensuring fair economic opportunities.

He is married to Sophie Gregoire, a former TV and radio host. They have three children.

China

President Xi Jinping

All eyes will be on the meeting of Xi and U.S. President Donald Trump on the sidelines of the G20 Summit in search of a breakthrough in their bitter trade dispute.

Since taking office in 2013, Xi has solid-



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ified power at home via his signature anti-corruption campaign and economic reforms. Many pundits consider him the most powerful Chinese leader since Mao Zedong, founder of the People's Republic of China, with his position strengthened by the elimination in 2018 of the two-term limit for the president.

Xi has pushed to increase China's influence abroad through the "Belt and Road" infrastructure development initiative, which has drawn support from over 120 countries across three continents.

The 66-year-old has also sought to assert a stronger military presence in the resource-rich East and South China seas, a strategy that has inflamed tensions with neighbors, including Japan.

Xi is a son of late Vice Premier Xi Zhongxun, who served under then Premier Zhou Enlai, and his wife, Peng Liyuan, who was a famous folk singer for the People's Liberation Army.

He enjoys sports such as soccer and swimming.

European Council

President Donald Tusk

The former prime minister of Poland has been at the helm of the European Union since 2014. His second and final term as president is set to end in November.

In his youth, he was an activist in Poland's Solidarity movement, which became a driving force in the fall of com-



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munist in Eastern Europe in 1989. He earned his living as a blue-collar worker for some years until the end of communist rule in Poland.

Tusk was first elected to Poland's lower house in 1991 and served as prime minister from 2007 to 2014, during which Poland continued to maintain economic growth.

In 2014, Tusk became the first member from among the 10 countries that joined the European Union in 2004 to occupy one of the most important posts in Brussels. He was re-elected president of the European Council in 2017.

During the Ukraine crisis, he held a series of talks with German Chancellor Angela Merkel and took a firm stance against Russia, while calling for EU unity.

The 62-year-old is known as an avid soccer fan.

European Commission

President Jean-Claude Juncker

Juncker, a 64-year-old former prime minister of Luxembourg, is known as one of the main architects of the Maastricht Treaty signed in 1992 that established the European Union and led to the creation of a common currency, the euro.

Juncker has been politically active from his youth, joining the Christian Social



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People's Party, which has been a dominant force in Luxembourg politics, in 1974. He was first appointed to a government post at the age of 28 and swiftly rose through the ranks.

He served as Luxembourg prime minister for almost 20 years from 1995 before being elected to the presidency of the European Commission in 2014.

With his term set to end in October, Juncker recently said that one of his major achievements was to have helped keep Greece in the eurozone amid the European debt crisis, while one of his worst failures was to have kept silent ahead of the 2016 Brexit referendum despite what he called "lies" told by campaigners promoting Britain's departure from the European Union.

Juncker earned a master's in law in 1979, but never practiced as a lawyer.

France

President Emmanuel Macron

Macron made history when he became the youngest French president in May 2017.

The 41-year-old former economy minister was the first president not to belong to either of the two major political forces that



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had shaped politics in postwar France.

This year's G20 Summit will be the president's first time in Japan since taking office.

Born to two doctors in the northern French city of Amiens in 1977, Macron has a background in philosophy and graduated from the Ecole Nationale d'Administration in 2004.

The president polished his language skills working as an assistant editor of the works of philosopher Paul Ricoeur, after which he served as the economy minister in 2014. He eventually passed his signature legislation, the "Macron Law," which targeted financial growth in the country by extending store opening hours to Sundays.

Macron expressed his determination to rebuild Notre Dame Cathedral within five years after a devastating fire engulfed it on April 15, with various countries, including Japan, pledging support for its reconstruction.

He married his high school teacher Brigitte Macron, nee Trogneux, in 2007.

Germany

Chancellor Angela Merkel

Assuming her post in November 2005, Merkel is the third-longest serving German chancellor since World War II, behind Helmut Kohl and Konrad Adenauer.

The 64-year-old, the country's first female chancellor, was born in Hamburg in 1954 to a mother who taught English and Latin and a father who was a pastor in the Protestant Church. She grew up in East Germany and is fluent in Russian.

Merkel, trained as a physicist, worked at the Central Institute for Physical Chemistry at the Academy of Sciences in Berlin before entering politics in 1989.

She served an array of positions prior to becoming chancellor, including minister for women and youth, during which she

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اردو
Urdu

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Vietnamese

profiles of G20 leaders



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emphasized the benefits of good early childhood education, as well as parental leave for both parents.

In October, Merkel announced that she would not seek re-election as the leader of the Christian Democratic Union and said she would step down as chancellor in 2021, bringing her 16 years in power to an end.

Merkel is passionate about sports, believing it can be a “real driving force for integration.” She has been married to her scientist husband Joachim Sauer since 1998.

India

Prime Minister Narendra Modi

Modi was sworn in for a second straight term in office in late May following his party’s landslide victory in the general election. He is the first prime minister of India to be born after India attained independence.

Facing slowing economic growth and high unemployment, Modi has pledged to increase infrastructure investment and improve living standards in regional areas.

Modi has been seeking to boost India’s engagement with East Asian nations under his “Act East” policy and has backed Prime Minister Shinzo Abe’s call for a rules-based, free and open Indo-Pacific region.

Abe and Modi have built a close relationship through a series of reciprocal visits. Last year, Modi became the first for-



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eign leader to visit Abe’s vacation home near Mount Fuji.

Modi, a former tea seller, rose through the ranks of the Bharatiya Janata Party and became prime minister in 2014. He was born to a poor family in a small town in Gujarat in western India. He completed his M.A. in political science at Gujarat University. He is known as “India’s most techno-savvy leader,” and is very active on various social media sites such as Facebook, Twitter, Google+, Instagram and LinkedIn.

Indonesia

President Joko Widodo

Better known as “Jokowi,” the 58-year-old has been popular among the public as the first commoner to serve as president of Indonesia, born into the poor family of a carpenter.

His expected trip to Japan will follow his re-election in an April presidential race that



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will extend his term to 2024. He was first elected to lead the country of 260 million in 2014.

Born in Solo in Central Java province in 1961, Jokowi studied forestry at Gadjah Mada University and was successful in his furniture exporting business.

He was elected mayor of Solo in 2005 and governor of Jakarta in 2012, during which he quickly gained popularity by regularly visiting local communities, particularly poor areas, and spending time talking to residents about the city’s problems such as floods and transportation issues. He continued those activities after being elected president.

Riding on the success of the Asian Games last summer, the president has expressed his willingness to host the Summer Olympics in 2032 as the first Southeast Asian country to do so.

He likes riding motorcycles and listening to heavy metal music.

Italy

Prime Minister Giuseppe Conte

Before being sworn in as prime minister of Italy in June 2018, Conte was a law professor with no previous political experience.

The 54-year-old, who has a reputation as a sharp dresser, was picked by the anti-establishment 5-Star Movement and the Northern League, which form the current ruling coalition that ended a months-long political vacuum after no single party won a majority in the last general election.

Under his government, Italy became in March the first Group of Seven economy



REUTERS / VIA KYODO

to join Chinese President Xi Jinping’s “Belt and Road” cross-border infrastructure initiative.

In a meeting the following month in Italy, which will hold the G20 presidency in 2021, he agreed with Prime Minister Shinzo Abe on the need for high-quality infrastructure that can achieve both economic growth and fiscal sustainability.

Conte was born in a town of some 400 residents in Italy’s southern region of Puglia. The expert in civil law graduated from Sapienza University of Rome. He later ran a law firm, while teaching at some universities.

Japan

Prime Minister Shinzo Abe

Abe, who in November is likely to become Japan’s longest-serving prime minister, hopes to exhibit his leadership skills and ability to coordinate a diverse group of G20 leaders ahead of an Upper House election this summer.

Since his return to power in 2012 touting his Abenomics policy mix, the 64-year-



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old, who was born into an establishment political family, has been working on various economic reforms to pull Japan out of chronic deflation.

Positioning himself as U.S. President Donald Trump’s closest ally among world leaders, the two have played numerous rounds of golf together. During Trump’s state visit to Japan in late May, he made efforts to entertain the U.S. leader while broaching difficult issues such as bilateral trade and North Korea.

In 2006, Abe became Japan’s youngest prime minister in the postwar era but stepped down after a year due to health problems.

He is Japan’s first prime minister born after WWII. His grandfather, Nobusuke Kishi, was also prime minister from 1957 to 1960.

Mexico

President Andres Manuel Lopez Obrador

Lopez Obrador secured victory in Mexico’s presidential election last year in his third attempt, supported by voters frustrated with corruption-tainted establishment parties.

The 65-year-old joined the then-dominant Institutional Revolutionary Party in 1976 before moving to the Party of the Democratic Revolution.

The former Mexico City mayor became president after launching the National Regeneration Movement, also known by



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its Spanish acronym MORENA, following his defeat in the 2012 presidential election. He has vowed to eradicate corruption and transform Mexico.

Obrador, known for his hardline stance against the United States, is tasked with dealing with the issues of illegal immigrants and free trade negotiations with U.S. President Donald Trump.

Born in Macuspana in the southern state of Tabasco in 1953, the president, widely called by his initials “AMLO,” is a baseball fan. He reveres Benito Pablo Juarez Garcia, the former president and national hero.

The president has said he will not attend the G20 Summit.

Russia

President Vladimir Putin

Putin, in his fourth term as president, is a familiar face among world leaders. The 66-year-old former KGB agent has dominated Russia’s political scene since 2000 and some call him a “tsar.”

Under Putin’s leadership, Russia has confronted the United States and European countries in recent years that have imposed crippling economic sanctions following Moscow’s annexation of Ukraine’s Crimean Peninsula in 2014 and its involvement in the Syrian civil war.

Prime Minister Shinzo Abe plans to meet with Putin on the sidelines of the G20 Summit, with the focus on any progress in bilateral negotiations to conclude a postwar peace treaty.

Putin is also expected to hold talks with U.S. President Donald Trump.

Putin is known as a dog lover and a judoka who does not hide his appreciation for the Japanese sport. He was born in what is now St. Petersburg in Russia, and earned his law degree at Leningrad State University.



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Saudi Arabia

Crown Prince Mohammed bin Salman

Son of King Salman bin Abdulaziz, 33-year-old Mohammed bin Salman is widely considered to be the power behind the throne,

having been elevated to heir presumptive in 2017. He will attend the G20 Summit in place of the king, as he did last year.

The crown prince, known as MBS, has pushed to liberalize the conservative Muslim nation, including removing a ban on female drivers and limiting the powers of the religious police that had enforced strict morality codes.

MBS has also sought to diversify the economy past its huge, but finite, oil reserves such as by attracting investment,



REUTERS / VIA KYODO

but those efforts hit a snag due to a delay in plans to take state-owned oil company Saudi Aramco public.

The crown prince serves concurrently as deputy prime minister and defense minister of Saudi Arabia, which will host the G20 Summit next year. He is known as a fan of Japanese manga and anime.

He graduated from King Saud University with a B.A. in law. Unlike other Saudi royals, he did not receive an education in the West.

South Africa

President Cyril Ramaphosa

Ramaphosa’s participation in this year’s summit will come about a month after he was elected to his first full term by the country’s National Assembly.

The 66-year-old first took office last year after former President Jacob Zuma resigned.

Ramaphosa first came to public atten-



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tion when he appeared alongside anti-apartheid icon and later President Nelson Mandela when he was making his first public speech in 1990 upon his release from prison.

An anti-apartheid activist himself, Ramaphosa was elected as secretary general of the African National Congress, the country’s current ruling party, in 1991.

Ramaphosa retired from politics in 1997 and became a director of an investment company. He was listed as one of the wealthiest people in Africa by Forbes magazine, with an estimated net worth of \$450 million as of 2015. He returned to politics in 2012.

After the G20 Summit, Ramaphosa is expected to return to Japan in August for the seventh round of the Tokyo International Conference on African Development (TICAD VII), to be held in Yokohama.

South Korea

President Moon Jae-in

The 66-year-old has been seeking to establish a role as a mediator in the nuclear standoff between the United States and North Korea. But that has been put to the test following the breakdown of talks between U.S. President Donald Trump and North Korean leader Kim Jong Un in Hanoi in February.

Moon was born on Geoje Island in South Gyeongsang province to poor parents who fled North Korea during the 1950–1953 Korean War, which ended in an armistice agreement.

He was arrested twice while attending university, including in 1975 for taking part in protests against the dictatorship of then-President Park Chung-hee.

Before entering politics, Moon served as a human rights lawyer, running a law office



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in Busan with Roh Moo-hyun, who also later became president.

Moon was sworn in as president in May 2017 for a five-year term after his predecessor Park Geun-hye was impeached over a corruption scandal.

His achievements during the past two years in office include improvement in inter-Korean relations, having held talks with Kim three times since last year. But South Korea’s ties with Japan have become strained over various matters, including wartime compensation issues.

Turkey

President Recep Tayyip Erdogan

Erdogan, a soccer player-turned-politician, has led the country for more than 15 years since becoming prime minister in 2003. In 2014, he assumed the presidency, which before was a mostly ceremonial role.

He has cemented his power since a



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failed coup by a faction of the military in July 2016. Following the incident, the government instituted a state of emergency from July 2016 to July 2018. On April 16, 2017, a constitutional referendum was held and resulted in voters approving constitutional amendments changing Turkey from a parliamentary to a presidential system. The amendments went into full effect following the presidential and parliamentary elections in June 2018, when Erdogan was re-elected for another five-year term, with new executive powers endorsed in the referendum.

Hailing from Istanbul, Erdogan is known as a devout Muslim who does not drink or smoke.

Erdogan has held talks with Prime Minister Shinzo Abe a number of times. He has traveled to Japan several times, including a private visit to watch the 2002 FIFA World Cup.

United Kingdom

Prime Minister Theresa May

Following the historic referendum to leave the European Union, May took over as the country’s second female prime minister in 2016 after Margaret Thatcher.

But the 62-year-old resigned as leader of the Conservative Party on June 7 after having repeatedly failed to secure parliamentary approval for her Brexit deal. She will, however, remain as prime minister until her successor is selected, possibly by the end of July.



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Before being elected to Parliament in 1997, May worked at the Bank of England for six years and later became head of the European Affairs Unit of the Association for Payment Clearing Services.

She went to both state-run and private schools before studying geography at St. Hugh’s College, Oxford University, where she met her husband Philip May through an introduction by the future Pakistani Prime Minister Benazir Bhutto.

When former Prime Minister David Cameron took power in 2010, she was appointed home secretary and in that role advocated tighter restrictions on immigration. She was the longest-serving home secretary for over 60 years.

Known as a fashion-conscious leader, she also loves cricket and cooking.

United States

President Donald Trump

The 73-year-old president has pursued an “America First” foreign policy since taking office in January 2017.

A real estate developer and television personality once seen as a long-shot Republican candidate for president, Trump is



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now setting his sights on re-election amid a trade war with China, stalled negotiations on North Korean denuclearization and tensions with Iran over its nuclear deal.

Prior to becoming president, Trump, who took control of his father’s business in 1971, also hosted reality TV show “The Apprentice,” with his catchphrase being “You’re fired.”

The president is an avid golfer who often uses the game to conduct business. He is a non-smoker who loves fast food, but abstains from alcohol, preferring to drink Diet Coke.

Prime Minister Shinzo Abe has developed a personal rapport with Trump, with the two frequently holding talks and playing golf. Trump will be visiting Japan again after his trip as a state guest in May.

Invited guests and international organizations

- Netherlands
- Singapore
- Spain
- Vietnam
- ASEAN President (Thailand)
- AU President (Egypt)
- Chile (APEC President)
- Senegal (NEPAD President)
- United Nations (U.N.)
- International Monetary Fund (IMF)
- World Bank
- World Trade Organization (WTO)
- International Labour Organization (ILO)
- Financial Stability Board (FSB)
- Organization for Economic Cooperation and Development (OECD)
- Asian Development Bank (ADB)
- World Health Organization (WHO)

changing environment

Japan weighs strategy after shocking climate report

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In October 2018, the Intergovernmental Panel on Climate Change (IPCC) released a report that sent shock waves around the globe. The world's leading body of climate scientists warned that there might be only 12 years left to ensure global warming is kept to a rise of 1.5 degrees Celsius. Beyond that, the IPCC said, the risk of droughts, floods and extreme heat greatly increase.

"Limiting global warming to 1.5 degrees would require rapid, far-reaching and unprecedented changes in all aspects of society," the report said.

The 1.5 degree figure represents the ideal goal under the 2015 Paris climate change agreement. Nations pledged to respond to the threat of global warming by "holding the increase in the global average temperature to well below 2 degrees Celsius above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels."

Under the Paris accord, Japan must cut its greenhouse gas (GHG) emissions by 26 percent compared with 2013 by 2030. But the October 2018 IPCC report has helped spur efforts by Japanese corporations, local governments and nongovernmental organizations to push the central government to go further.

The central government is also now debating a new strategy to cut greenhouse gas emissions even more as it resists calls within and outside Japan to completely phase out the use of coal by midcentury.

Under a 2006 set of IPCC guidelines, Japan released an annual report on its greenhouse gas emissions, called the National Greenhouse Gas Inventory. The latest report for 2019 covers emissions in the fiscal 2017 period (April 2017 to March 2018). During that time, total emissions of seven greenhouse gases — carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorinated compounds, sulfur

hexafluoride and nitrogen trifluoride — amounted to nearly 1.3 million tons of carbon dioxide equivalent. While the figure marked a 1.2 percent decline compared with the previous fiscal year, it was a 1.3 percent increase compared with 1990, the base year countries use to calculate changes in their emissions.

With climate change on the agenda for the Group of 20 Summit in Osaka later this month, there are likely to be discussions on Japan's "Society 5.0" policy initiative. The initiative integrates physical space and cyberspace under which technological developments can be applied to overcome long-term problems the country — and the world — have struggled with, including climate change.

Society 5.0 promotes the further development of artificial intelligence and the increased use of data storage on the internet to tackle a variety of economic and social problems, but is also intended to help the world achieve a more decarbonized society and the more efficient and sustainable use of natural resources.

Two environmental issues in particular helped form the basis of the Society 5.0 goals. These include a worldwide need to reduce GHG emissions and food loss while increasing energy and food production for a world population that continues to grow overall, but where certain nations — including Japan — are declining and graying. Via more integrated data systems that use internet cloud storage, the industrial and agricultural sectors can operate more efficiently, not only economically, but also environmentally. With everything from weather information to the available amount and price of nonfossil fuel generated electricity at any given time, the sectors will be able to make quick decisions based on such data.

Japan's energy sector accounted for 88 percent of total emissions, the industrial sector accounted for 7.7 percent, the agricultural sector 2.6 percent and the waste sector 1.6 percent. Indirect carbon dioxide

emissions amounted to just under 1 percent of the total.

Estimated GHG emissions from waste incineration in fiscal 2017 amounted to 12,238 kilotons equivalent of carbon dioxide.

That's less than 1 percent of the 1.3 million tons in total GHG emissions, but it represents a nearly 12 percent decrease compared with the 1990 base year used for calculating greenhouse gas inventories.

Emissions from fossil-fuel derived waste, including plastics, cardboard, synthetic textiles and waste oil, accounted for 10,808 of the total 12,238-kiloton carbon dioxide equivalent.

The remainder came from incineration of waste that was either a mixture of fossil fuel derived and biogenic or purely biogenic.

But it is emissions from coal power plants, in particular, that political entities, businesses, nongovernmental organizations and the media in Japan have focused on since the October 2018 IPCC warning.

In November, the environmental group Kiko Forum released a report on how the country could also phase out coal by 2030 without threatening Japan's electrical power supply and without relying on nuclear power.

"The Japanese government should devise a detailed path for the retirement of coal, formulate an official Japan 2030 Coal Phase-Out Plan, and give it a high priority as part of a long-term low GHG development strategy," Kimiko Hirata, international director for Kiko Network, said in a statement announcing the report.

Kiko Forum called for new legislation to implement a coal phase-out and to revise the current energy mix for 2030, which calls for coal to provide 26 percent of Japan's electricity supply.

"The 2030 GHG reduction goal of 26 percent should be increased to 40 or 50 percent," Kiko Forum said.

The report said there were 117 units at existing coal power plants in Japan as of April last year. Gradually retiring them by

2030 is achievable without impacting the power supply or using nuclear power if the use of liquid natural gas is considered, renewable energy usage spreads, and progress continues to be made in energy efficiency, the report said. Calls to decarbonize even further also came from the Japan Climate Initiative, a group formed earlier this year that consists of 264 companies along with 30 cities and municipalities.

A May 16 letter signed by 26 local governments, including Tokyo, Yokohama, Osaka, Kyoto, Sapporo and Kitakyushu, as well as 143 banks, financial institutions, construction companies, manufacturing firms, renewable energy suppliers and others, including The Japan Times, warned that the October 2018 IPCC report showed the world needs to reach "net zero" by 2050 and reduce carbon dioxide emissions by about 45 percent relative to 2010 levels in order to keep the global temperature rise below 1.5 C.

"In the Japanese context, the most important set of measures to realize a decarbonized society is to promote energy efficiency in a comprehensive manner and maximize the use of renewable energy," the letter read.

"Many companies and local governments in Japan are starting to work beyond the conventional government plans to achieve greater use of renewable energy and zero emissions," it concluded. "If the government issues a clear message for decarbonization, it will further accelerate the leading efforts by private sectors and local governments. We strongly ask for a more ambitious long-term strategy that shows Japan's leadership to the world when it comes to addressing climate change."

Such calls are also coming at a time when renewable electricity prices are coming down and when utilities and firms are rethinking their commitment to coal. Kansai Electric Power Co. has announced it will expand its renewable energy portfolio to six gigawatts, the equivalent of nearly four large-scale nuclear power plants, by 2030.



GETTY IMAGES

Marubeni Corp. has announced a target of doubling its renewable energy revenues by 2025. Last year, Marubeni said it was getting out of coal. Meanwhile, three coal power plant projects have already been canceled in Japan this year.

Coal is supposed to account for 26 percent of Japan's energy mix in 2030 under a plan approved in 2015. It accounted for 28 percent of Japan's electric power in 2018, according to an estimate by the Institute for Sustainable Energy Policies and based on data from the Federation of Electric Power Companies.

Faced with a swell of support since the October 2018 report from leading Japanese industries, local governments and the general public for stronger decarbonization measures, the central government is responding.

In April, a panel preparing a new long-term climate change strategy called for

more renewable energy and less coal power, though it did not endorse a complete phase-out that environmental groups say is critical to helping meet the goals of the Paris agreement. The final draft is expected to be ready by the end of this month, in time for the G20 Summit.

"Responding to climate change is no longer a cost for the economy, but a growth strategy for the future. By firmly creating a virtuous cycle between the environment and growth, Japan will take the lead in making a paradigm shift in global environmental policy," Prime Minister Shinzo Abe said during a meeting on June 11 to discuss a long-term growth strategy under the Paris agreement.

Given the severity of the crisis and the need to reduce greenhouse gas emissions quickly in not only Japan, but also worldwide, that shift is needed now more than ever.

Sekisui House on climate

(Sponsored content)

Global housing giant takes on environmental leadership role

As the world faces numerous sustainability and environmental issues, governments and businesses are tasked with coming together to find solutions to the problems that most affect our global community.

In the housing industry, Sekisui House Ltd. has taken on the mantle of environmental leadership, paving the way toward a sustainable future by aligning its environmental goals with those of the international community and committing itself to addressing sustainability and climate change by reducing carbon dioxide emissions and preserving the environment of its communities.

"I believe companies have a huge responsibility to contribute to society," and that is why Sekisui House is fully committed to reducing the risk of climate change, Chairman and Representative Director Toshinori Abe said during a recent interview with The Japan Times.

'Eco-First Company'

Founded in 1960, Sekisui House is one of Japan's largest homebuilders, building around 45,000 houses every year. With 2.4 million properties in total, the Osaka-based company is engaged in a wide array of business ventures, including condominium and hotel development, home renovation and leasing services. The company is active around the world, developing projects in Australia, China, Singapore and the U.S., with sales last year amounting to approxi-

mately \$20 billion.

At the heart of Sekisui House's philosophy is a commitment to providing houses that suit the diverse needs of its homeowners and ensuring the health and safety of its communities. With the announcement of its Environmental Future Plan in 1999, Sekisui House established itself as an industrial leader by being the first in its field to present a framework for a housing environment that preserves the planet for future generations. In 2008, the homebuilder was recognized for its environmental efforts when it became the first in its industry to be certified by the Ministry of the Environment as an "Eco-First Company" — a designation given to companies recognized as leaders of environmental initiatives in their respective industries.

"As part of our eco-first commitment, we are committed to implementing net zero-energy houses (ZEH), reducing the amount of materials we use and completely reducing carbon dioxide emissions. This commitment also entails eliminating waste at our factories and construction sites — targets we have already nearly achieved," Abe said.

Another aspect of the company's eco-first commitment is the restoration of ecological networks, particularly through what the homebuilder calls "Gohon no ki" (five trees), a gardening concept that creates friendly environments for birds and butterflies, allowing harmonious coexistence with nature.

"As a global environmental leader, Sekisui House has set the following goals for 2050: decarbonization, zero deforestation and zero emission," Abe said. "These environmental initiatives are linked to our fundamental philosophy of providing houses that enable comfortable lifestyles for all residents, including children, the elderly and those with special needs."

Embracing renewable power

Among the many environmental issues facing the global community, climate change is one that calls for immediate action. Recognizing this urgency, Sekisui House has become an industrial and national leader in aligning its environmental goals with those of the international community. At the 2015 United Nations Climate Change Conference, Sekisui House was the only Japanese firm to join the Global Alliance for Buildings and Construction established that year.

Further exemplifying its position as a leader in climate action, Sekisui House became the first in the country's construction industry to join the RE100 initiative in 2017 that aims at using only renewable energy in business activities, and its carbon dioxide emissions reduction target for 2030 was approved by the Science Based Targets initiative last year.

In current times, the relationship between business, society and the environment is becoming increasingly complex and integrated. This is reflected in the issues of climate change and sustainability, which present latent risks and opportunities for businesses. It is for this reason that Sekisui House consistently assesses risks and opportunities from a perspective based in sustainability and the U.N.'s Sustainable Development Goals.

A crucial initiative for assessing risks and opportunities related to climate change is the Task Force on Climate-related Financial Disclosures (TCFD), which develops voluntary climate-related financial risk disclosures for companies to use when providing information to stakeholders. In 2018, Sekisui

House became an advocate of the initiative and ever since has assessed risks and opportunities based on scenarios that align with TCFD's recommendations.

The TCFD is a crucial component of the global business environment because it allows businesses and their stakeholders to systematically assess the financial risks of climate change. By developing these financial risk disclosures, the TCFD strengthens the stability of the financial system and creates the impetus for a transition to a more sustainable economy. In 2008, Sekisui House became the first company in Japan to declare its intentions to completely eliminate all CO2 emissions by 2050, and has been making the utmost efforts to align with its call to limit global warming to 1.5 degrees Celsius.

'As a global environmental leader, Sekisui House has set the following goals for 2050: decarbonization, zero deforestation and zero emission.'

SEKISUI HOUSE LTD. CHAIRMAN TOSHINORI ABE

Over 40,000 ZEH

Central to the company's initiative to address climate change are its net zero-energy houses, which use cutting-edge insulation technology to reduce energy requirements and solar-power generation systems to account for remaining energy needs. Utilizing its wealth of expertise and technology, Sekisui House's ZEH combine comfortable living with durable, environmental design.

"One of the unique characteristics of our ZEH is their large windows, which allow bright living environments," said Abe. "Solar roof panels are seamlessly incorporated into the design so that they are unnoticeable when looking at the houses' exteriors. The design reflects our objective to bring together aesthetics, functionality and comfort."



Sekisui House Ltd. Chairman and Representative Director Toshinori Abe says the housing giant is committed to reducing carbon dioxide emissions. YOSHIAKI MIURA

Sekisui House is fully committed to implementing ZEH throughout its business ventures. In fiscal 2018, zero-energy houses accounted for 79 percent of all new properties, and a total of 44,247 ZEH have been built. Abe made a presentation about these efforts at the COP24 U.N. Climate Change Conference 2018 held in Katowice, Poland, in December last year. "We are the largest provider of zero-energy houses not only in Japan, but also in the world," he said.

Though Sekisui House is proactively implementing ZEH into its business ventures, there is still room for improvement in Japan, where ZEH account for only around 10 percent of homes built by major companies in Japan, according to Abe. He went on to add that this presents both challenges and opportunities.

"The situation calls for us to continue stressing the importance of addressing climate change," said Abe. "In addition to my position as chairman and representative director of Sekisui House, I also serve as chairman of the Japan Federation of Housing Organizations, and this topic

often comes up at meetings. At Sekisui House we are working as hard as possible to expand the presence of zero-energy houses.

"Going forward we will focus efforts on renovating leased condominiums and other properties so that they acquire some of the qualities of zero-energy houses, such as low energy consumption and solar power generation," he explained.

Abe hopes that at the G20 Summit in Osaka, international leaders will use the topic of climate change to come together and establish a shared understanding regarding the importance of addressing the environmental issue, similar to how world leaders united in 2015 to sign the Paris agreement.

"Just last year we experienced fierce heat waves and powerful typhoons in Japan, and as such we are very aware of the effects that a 1 or 2 degree increase in global warming may bring. It is therefore vital that we come together to establish an understanding among countries around the world and use it as a foundation to take comprehensive action," Abe said.



Sekisui House Ltd.'s roofing uses photovoltaic generation technology to address energy needs. SEKISUI HOUSE LTD.

CEATEC

(Sponsored content)

Tech show a glimpse into society's potential future

This year's CEATEC (Combined Exhibition of Advanced Technologies) will be held in Makuhari Messe in Chiba Prefecture from Oct. 15 to 18.

Registration and reservations for conferences will start in early August on the CEATEC website, www.ceatec.com.

The event is sponsored by the CEATEC Executive Board, comprised of the Japan Electronics and Information Technology Industries Association, the Communications and Information Network Association of Japan and the Computer Software Association of Japan.

With origins as an IT and electronics show when it started back in 2000, CEATEC now includes all industries and business categories that create or make use of advanced technologies such as CPS (cyber-physical system), the "internet of things" (IoT), robots and artificial intelligence (AI).

In addition to a large exhibition area where booths will showcase products, solutions and services of participating companies and organizations, there are two planned exhibits — "Society 5.0 Town," a future town mainly co-developed by various service sector businesses, and "Co-creation Park," which is for startups, universities and educational institutions, as well as overseas organizations such as foreign embassies.

This year marks CEATEC's 20th anniversary, but during an interview with The Japan Times, Kiyoshi Shikano, the executive producer of CEATEC, revealed the board decided not to use the word "anniversary" in CEATEC's logo.

"We merely put '20th' without 'anniversary' because we only look to the future. Instead, we added copy that says 'Toward Society 5.0' to express where we are

headed to," he said.

Society 5.0 is a concept proposed by the Cabinet Office of Japan that describes a super-smart society where innovations and technologies, making the most of artificial intelligence and robots, are incorporated to create solutions to various issues. This concept will also be one of the key features to be shared among participants at the upcoming G20 Summit in Osaka in June.

Although everything and everyone is connected via the internet nowadays, the most important factor is how the data in cyberspace can relate to what is happening in the real and physical environments where people live and work. "Working on this part is the first step toward (realizing) Society 5.0," said Shikano.

"It requires not just one but diverse industries to realize a super-smart society. It is becoming harder for companies to stand alone and still survive, too," he later added. That is why companies from various industries flock to CEATEC and collaborate with each other to showcase what society may look like in 10 years from now.

Last year, 725 companies exhibited at CEATEC, 345 of which participated for the first time. The number of exhibitors has increased every year since 2015 (531 exhibitors), the year when the exhibition hit bottom because of the changing needs of participants and a globally competitive landscape.

"We made a major shift in 2016 from an exhibition focusing on IT and electronics to one that centers around CPS and IoT," said Shikano. This transformation brought about success in attracting companies and individuals who were hungry for more than just new products.

The main exhibition area where most companies set up their booths is divided into three sections. "Total Solutions" is for products and solutions that are designed to help diverse industries to collectively realize Society 5.0; "Smart X" is for innovations that will cause revolutionary changes in a specific industry; and "Devices & Tech-



nologies" is for showcasing electronic components, devices, software and other technologies that support the creation of Society 5.0.

While the main area consists of independent booths, a planned exhibit, Society 5.0 Town, is made up of companies from diverse sectors such as banking, construction, logistics, retail, transport and entertainment, as well as local governments. The idea takes last year's IoT Town, themed around "experiencing and disseminating the future," a step further. This was through the expectation that Society 5.0 Town functions more like a society where each business sector connects to the other, improving the efficiency and convenience of people's lives.

"As soon as the exhibitors of Society 5.0 Town are confirmed, we will invite all of them to a roundtable meeting," said Shikano. In the meeting, the exhibitors, each from different industries, will discuss and decide what and how things will be displayed to offer visitors a holistic and continuous experience of a future town.

"CEATEC is one of a kind in that regard. It is not just a trade fair where companies are only interested in selling their own products," he said. Shikano went on to say that what is important is not the technologies



Above: CEATEC Japan 2018 was successful with 156,063 visitors. Left: Prominent panelists discuss connecting society during CEATEC Japan 2018. CEATEC EXECUTIVE BOARD

themselves, but how different industries can use these technologies to collaboratively recreate society.

CEATEC also attracts younger generations. Last year, students accounted for about 5 percent of visitors. They visit the exhibition not only to learn about new technologies, but to also experience how such technologies may change their lives.

"Some universities incorporated the attendance of CEATEC conferences in their curriculum last year. We will continue to enhance programs designed for students," said Shikano. He hopes that CEATEC contributes toward alleviating a shortage of human expertise in the field of IoT.

A total of 30,748 people attended 163 conference sessions last year. Shikano said that the board is eager to invite more speakers from non-IT and electronics industries and other countries to give speeches to promote and reflect the diversity of CEATEC.

The number of visitors is increasing year by year, hitting 156,063 in 2018. CEATEC has the potential to be on par with CES, the world's largest consumer electronics trade show. CES attracts more than 182,000 visitors every year.

"But we are not just concerned about the numbers. We are more concerned about who, and with what intention, comes to our exhibition," said Shikano. To learn

as much information as possible about attendees, the exhibition requires pre-registration from all visitors.

In addition to personal information for verification, CEATEC collects data such as a visitor's industry type, occupation and position, and purpose of the visit through a questionnaire. The information is analyzed and distributed to exhibitors to aid their marketing efforts.

The CEATEC executive board is taking measures to boost the number of overseas attendees. CEATEC's exhibition dates have been shifted from the first to the third week of October as of last year, taking into consideration that Unity Day in Germany and National Day in China fall during early October.

"We also changed the CEATEC logo from 'CEATEC Japan' to only 'CEATEC' this year, with our strong determination to make this exhibition more international," Shikano said.

Changes will also apply to Co-creation Park, another of CEATEC's planned exhibits. Previously, this area's startup zone was divided into two parts, one for domestic startups and the other for international. This year, all participating companies will be randomly located, irrespective of their origin. Shikano hopes that this will inspire further communication and innovation among exhibitors.



Top and above: Some of the cutting-edge technology on display at CEATEC Japan 2018.

CEATEC EXECUTIVE BOARD



A rendering of "Society 5.0 Town," an area of the event space created in collaboration among companies from diverse sectors such as banking, construction, logistics, retail, transport and entertainment as well as local governments. CEATEC EXECUTIVE BOARD



Connecting Society, Co-creating the Future

2019

10.15 TUE

10.18 FRI

Makuhari Messe
www.ceatec.com

Sponsors CEATEC Executive Board
JEITA Japan Electronics and Information Technology Industries Association
CIAJ Communications and Information network Association of Japan
CSAJ Computer Software Association of Japan



CEATEC

CPS/IOT EXHIBITION

20th
Toward Society 5.0

Osaka and Kansai

(Sponsored content)

A wellspring of history, innovation

Boasting flourishing industries and a plethora of sights steeped in rich history, the Kansai region has long been a political, cultural and commercial center of Japan.

Located in the western part of Japan, Kansai consists of eight prefectures — Osaka, Kyoto, Nara, Wakayama, Hyogo, Shiga, Tokushima and Tottori — as defined by the Union of Kansai Governments, and is easily accessible from Tokyo via shinkansen; the journey from Tokyo Station to Shin-Osaka Station takes around two-and-a-half hours. Additionally, travelers can access various destinations throughout the region from Kansai International Airport in Osaka where this year's G20 Summit will be held on June 28 and 29.

The beginnings of Japanese civilization can be traced back to Kansai. Emperor Nin-toku's tomb, one of the largest in the world, was built in Osaka in the fifth century, and in early Japan, Naniwa-zu port in the city of Osaka served as a point of contact with foreign envoys.

Nara became Japan's first permanent capital in 710, and from 794, Kyoto reigned as the nation's capital for over a thousand years. During this time, the region produced countless cultural treasures that became part of the bedrock of traditional Japanese culture.

During the Edo Period (1603–1868), Osaka developed as the commercial center of Japan, earning the nickname “*tenka no daidokoro*” (“the nation's kitchen”). The moniker derived from Osaka's role as a warehouse and trading port of Japan's food and produce, but can just as easily refer to the abundance of delicacies now found throughout the city.

As influential merchants serviced bridges and canals, Osaka bustled with activity, creating a culture that encouraged residents to unleash their creativity. Osaka's Dojima Rice Exchange is one example of innovation that

took place in burgeoning Osaka. As the former center of Japan's system of rice brokers, the Dojima Rice Exchange is considered to have introduced the first instances of forward trading.

Commoner culture bloomed in Osaka during the Edo Period. For instance, this period saw the development of bunraku — Japanese puppet theater — which has blossomed into a performing art that is revered around the world.

In the Edo Period, dealers in medicine gathered in Osaka's Doshomachi district, where major pharmaceutical firms now have their offices. Today, the Kansai region has a wide-reaching network between these firms, medical universities, laboratories and cutting-edge research facilities.

Osaka is renowned for its entrepreneurial spirit, as exemplified by Shinjiro Torii, the founder of Suntory Holdings Ltd. The phrase “*yatte minahare*” — meaning “well, get to it then” — was a phrase Torii often used, signifying Osaka's go-getter and never-give-up spirit. This saying suits Torii, who persevered through several setbacks on his way to creating Suntory's iconic whisky brand. Another industrial giant hailing from Kansai is Konosuke Matsushita, founder of Panasonic Corp.

Osaka is home to several industrial trailblazers, such as utility knife manufacturer Olfa Corp., which invented the world's first snap-off blade cutter as well as food company Nissin Foods Holdings Co., which introduced the beloved Cup Noodle brand to the world. In addition, small and medium enterprises in Osaka demonstrate prowess across a wide range of fields, serving as a foundation for advanced industrial development.

Kansai is also engaged in cutting-edge medical research. The Center for iPS Cell Research and Application, Kyoto University,



Top: A bird's-eye view of the city of Osaka, with Osaka Castle in the background. Right: A series of events will be held at large plazas during Expo 2025 Osaka Kansai.
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for example, was founded in 2010 with a goal to develop induced pluripotent stem cells-based technologies.

Recognizing the importance of protecting the environment, the Kansai region is also engaged in initiatives to reduce plastic waste, conducting surveys and collaborating

with nonprofit organizations to treat specific areas affected by indiscriminate disposal of plastic waste.

With its rich history as Japan's cultural and industrial center, Kansai has something for everyone, and should be on the itinerary of everyone traveling to Japan.

A role in shaping the future

HIROFUMI YOSHIMURA
OSAKA GOVERNOR



Firstly, we are delighted to be able to host the G20 Summit in Osaka. We would also like to extend our warmest welcome to everyone visiting Osaka

Prefecture. It is a great honor to have leaders from countries and organizations throughout the world gather in Osaka to discuss how we will best shape future societies.

For a long time, Osaka and the wider Kansai region has prospered as a major commercial center. This region has two seemingly contradictory characteristics. While we respect tradition, we also love a challenge and to try new things. In addition, Osaka-Kansai is home to many manufacturing companies. Our region has contributed to the achievement of sustainable development goals (SDGs) in the

fields of public health — such as water purification — and life sciences, including regenerative medicine utilizing iPS cells.

Osaka will host a number of upcoming world-class events including the 2019 Rugby World Cup, World Masters Games 2021 Kansai and Expo 2025 Osaka Kansai. We hope to raise more awareness of these events.

Expo 2025 Osaka Kansai will operate under the theme “Designing Future Society for Our Lives.” We would also like to use this expo as an opportunity to discuss at a global level how society can help every individual realize their full potential. This, in particular, will be a great chance to contribute to achieving SDGs.

We would like to kindly ask that you keep an eye on Osaka and the Kansai region in the future.

Lastly, we sincerely hope that thorough discussions will be carried out throughout the G20 Osaka Summit regarding challenges facing humanity, such as marine plastic litter, and that a strong message will be formed at Osaka-Kansai toward finding solutions.

Region rich in cultural assets

The Kansai region, not only renowned as home to Japan's ancient capital, but still considered a major economic and cultural center today, boasts many cultural assets.

Among all of UNESCO's World Heritage sites in Japan, Himeji Castle in Hyogo Prefecture was one of the first to be registered. The *daitenshu* (main tower) of this stately white castle was built more than four centuries ago. The surrounding gardens are perfect for a scenic walk. In particular, Koko-en, a series of traditional gardens constructed on the former premises of high-ranking samurai residences, provides magnificent views.

Bunraku is a performing art that consists of narration, shamisen music and puppetry. The origins of bunraku date back to around 1600 and it is still performed in some theaters across the country, notably at the National Bunraku Theatre in Osaka. While the performances themselves are consid-

ered a “must-see,” the artistry of the puppets' costumes and props is equally commanding.

Shimogamo Shrine and its surrounding Tadasu Forest offer a quiet and refreshing atmosphere despite their proximity to Kyoto's vibrant downtown district. The shrine, which dates back around 2,000 years, is a designated UNESCO World Heritage site. At the end of July, the shrine hosts Mitarashi Matsuri, a ritual to wish participants good health as they walk barefoot in Mitarashi Pond.

Known as “the temple of flowers” because of its seasonal blooms throughout the year, Hasedera Temple in Nara boasts mesmerizing scenery. From mid-June, hydrangeas start to bloom in gradations of pale blue to dark pink all around the temple precinct.

URL: <https://osaka-info.jp/en/>
<https://kansai-guide.jp/rt/eng/>



Global spotlight on Kansai

The Kansai region is expected to continue garnering attention in coming months and years as a string of major international events takes place in the area through 2025.

One high-profile event on the calendar is the 2019 Rugby World Cup, which will be held in Japan for the first time between Sept. 20 and Nov. 2. Of the event's 12 venues, two are located in Kansai: Higashi-Osaka Hanazono Rugby Stadium (<https://www.rugby-osaka.hanazono.pref.osaka.jp/english/index.html>) and the Kobe City Misaki Park Stadium in Hyogo Prefecture. Sports fans also will not want to miss the World Masters Games 2021 Kansai (<https://wmg2021.jp/en/>), which will be held across the region over 17 days from May 14 through May 30 in 2021. The quadrennial multisports competition

will feature 59 events covering 35 sports, including karate and basketball.

Osaka will also host the World Expo 2025 on Yumeshima, a man-made island in Osaka Bay, between May 3 and Nov. 3. Under the theme, “Designing Future Society for Our Lives,” Expo 2025 Osaka Kansai (<https://www.expo2025.or.jp/en/>) is expected to showcase Japan's cutting-edge technologies, particularly in the fields of life science and biotechnology.

Last but not least, the Mozu-Furuichi Kofun — large ancient tumulus clusters in southern Osaka — is expected to be registered as a UNESCO World Heritage site in June or July. (<http://www.mozu-furuichi.jp/en/>). If listed, the tomb site is sure to boost Kansai's international reputation.



The main gate to Shimogamo Shrine in Kyoto GETTY IMAGES

Welcome to OSAKA, KANSAI

Osaka and the Kansai region are welcoming visitors from around the world.

Expo 2025 Osaka, Kansai, Japan

OSAKA

Tradition

OSAKA

TOKUSHIMA

TOTTORI

HYOGO

WAKAYAMA

SHIGA

Life Science

OSAKA

Food

OSAKA

World Masters Games 2021 KANSAI

KANSAI


Kansai Promotion Council for the 2019 G20 Osaka Summit

<https://www.2019-g20-osaka.jp/english.html>

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G20 ministerial meetings

Niigata, Niigata Prefecture
Agriculture Ministers' Meeting
May 11 to 12



Okayama, Okayama Prefecture
Health Ministers' Meeting
Oct. 19 to 20

Fukuoka, Fukuoka Prefecture
Finance Ministers and Central Bank Governors Meeting
June 8 to 9




Matsuyama, Ehime Prefecture
Labour and Employment Ministers' Meeting
Sept. 1 to 2


Nagoya, Aichi Prefecture
Foreign Ministers' Meeting
Nov. 22 to 23

Kutchan, Hokkaido Prefecture
Tourism Ministers' Meeting
Oct. 25 to 26

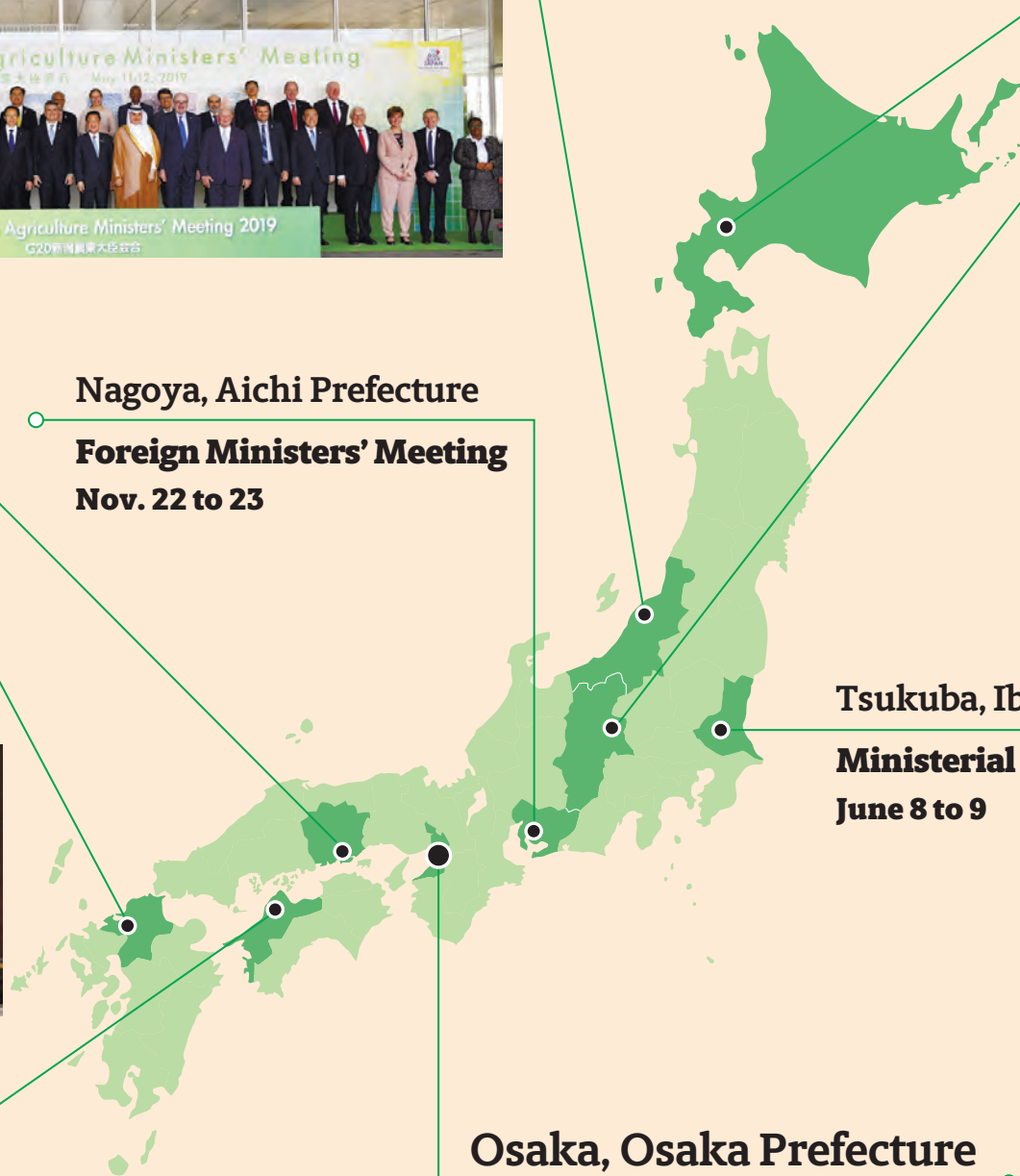
Karuizawa, Nagano Prefecture
Ministerial Meeting on Energy Transitions and Global Environment for Sustainable Growth
June 15 to 16



Tsukuba, Ibaraki Prefecture
Ministerial Meeting on Trade and Digital Economy
June 8 to 9



Osaka, Osaka Prefecture
G20 Summit Meeting
June 28 to 29



KYODO PHOTOS



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Hokkaido tourism

(Sponsored content)

Experience northern landscapes, flavors and culture

Japan's northernmost prefecture, Hokkaido, is home to troves of cultural, natural and culinary treasures, and every year throngs of travelers visit to partake in the region's seasonal activities.

Given its many attractions, Hokkaido is the perfect setting for this year's G20 Tourism Ministers' Meeting, which will be held in the town of Kutchan on Oct. 25 and 26.

Hokkaido is easily accessible from the rest of Japan. The main airport of Sapporo, New Chitose Airport, is a 90-minute flight from Haneda or Narita and can be reached via flights departing from 29 airports around the country. Those traveling by shinkansen can reach Hakodate from Tokyo in about four hours. New Chitose Airport, which serves as a gateway to Hokkaido, also has international flights to Asia. Starting from winter 2019, Finnair will open a new route for direct flights from Helsinki, while Qantas will begin direct flights from Sydney.

Kutchan and Niseko area

Kutchan's proximity to the Niseko mountain area has cemented the town's status as a preferred destination among travelers. World-class ski resorts and high-quality powder snow have made Niseko a hub for winter sports, attracting skiers and snowboarders from around the globe. Opportunities in the area continue to attract investment, ensuring further development in and around Niseko.

Though famous for its winter activities, Kutchan also offers a wide selection of outdoor activities to be enjoyed off-season, such as cycling, rafting and canoeing. As the seasons change, Kutchan sheds its snow to reveal beautiful greenery, pristine lakes and excellent hiking trails, with the picturesque Lake Hangetsu



Marimo (moss balls) are brought back to Lake Akan during an annual Ainu ritual.

and majestic Mount Yotei embodying the region's beauty. During summer, the charming homes, plentiful rice fields and azure sky of Kutchan's farmland offer an ideal setting for enjoying Hokkaido's rural landscapes.

Kutchan is only a two-hour drive away from central Sapporo. Because of its popularity among foreign travelers, the town has made extensive efforts to ensure visitors' stays are as comfortable as possible. English signage, as well as language assistance at the general hospital, are just a couple of the services available. With its rejuvenating hot springs, seasonal activities and scenic grace, Kutchan stands out among Hokkaido's many exceptional destinations.

Nature and wildlife

Hokkaido brims with wildlife and rich

natural habitats, offering ample opportunities to appreciate regional nature throughout the year. During summer, travelers can visit the beautiful Lake Akan, a crater lake in Akan-Mashu National Park, home to the rare algae species *marimo*, which morph into fascinating green balls that can grow up to the size of soccer balls.

Brown bear, deer and over 100 bird species also call this area home. With around 1 million seabirds inhabiting Teuri Island alone, Hokkaido is a birdwatcher's paradise. At the Akan International Crane Center, visitors can see elegant red-crowned cranes, symbols of good fortune since antiquity that appear in many paintings and folk tales.

The Shiretoko Peninsula to the east is among Hokkaido's prominent natural wonders and has been designated a UNESCO World Heritage site for its precious ecosystem and biodiversity. The peninsula is one of northeast Asia's premier areas for whales and orcas and is home to 13 species of whales. In spring and autumn, travelers can take night tours of the peninsula by car and enjoy glimpses of wildlife, as well as views of the starry



Grand Hirafu is Niseko's largest ski resort area, known for its high-quality powder snow and a wide variety of ski trails and parks.

sky undisturbed by artificial lights. There are also bear-watching boat cruises for travelers to admire the brown bears that inhabit the peninsula.

Hokkaido is commonly associated with winter. No sight better captures the magic of winter in Hokkaido than the drift ice that covers the Sea of Okhotsk. Travelers can take cruises departing from the cities of Abashiri and Mombetsu to see close-up views of this ice that is carried by winds and sea currents. More adventurous travelers can put on special dry suits and step out onto the ice for themselves. The sea eagles that swoop over and gather on the drift ice punctuate the breathtaking beauty of this natural phenomenon.

The Hokkaido region has a sacred con-

nection with the Ainu, the indigenous people of Hokkaido. The Ainu observed an animist faith, and worshiped daily necessities, such as fire and water, or things beyond their control as gods.

Though the Ainu were stripped of their distinctive culture due to the government's past assimilation policy, travelers can still interact with it by watching traditional dance performances and fire festivals at Akanko Ainu Kotan near Lake Akan, and learn about the indigenous people's culture through their government-designated traditional crafts or at museums in the Nibutani district.

Cuisine

Hokkaido is also known for its rich local deli-

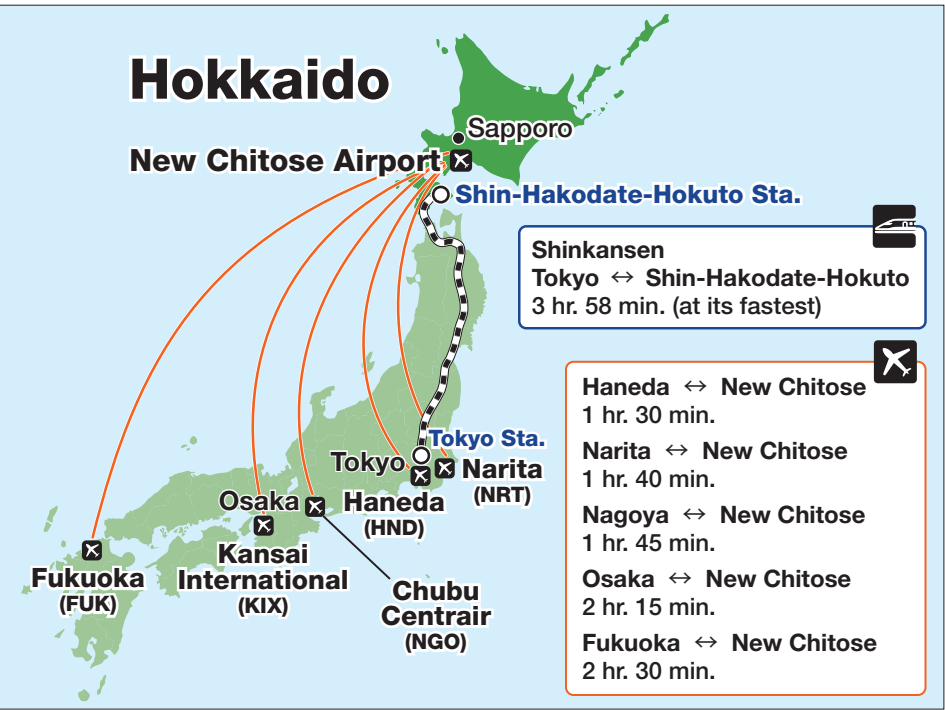
cacies, such as fresh seafood and vegetables, as well as livestock products such as beef, cheese and milk.

Much of this food can be savored in Sapporo. Delicacies include Genghis Khan, a popular grilled mutton dish often referred to as the "soul food" of Hokkaido, as well as local varieties of ramen and soup curry that have captivated the palates of foreign travelers.

Surrounded by the Sea of Okhotsk, the Sea of Japan and the Pacific Ocean, Hokkaido is blessed with an abundance of ocean fish, and the historic city of Hakodate in southern Hokkaido is a haven for seafood lovers. Long flourishing as a trading port to supply the Japanese mainland, the city is filled with restaurants and markets that serve up mouthwatering dishes of fresh crab, scallops and salmon.

Travelers may also be delighted to learn that Hokkaido has a rich history of producing beer, whisky and wine. In the town of Yoichi, travelers can tour the facilities of iconic whisky maker Nikka Whisky Distilling Co., and learn about the maker's history and preparation methods.

Visitors can also stop by the Sapporo Beer Museum to learn about the history and brewing process of one of Japan's most popular beers, produced in Sapporo since the 19th century. Wine connoisseurs are also in luck as Hokkaido produces distinctive wines that pair perfectly with award-winning local cheeses.



A Yezo brown bear on the Shiretoko Peninsula

©SHIRETOKO RAUSU LINCLE



Fresh seafood is abundant in Hokkaido.

Hokkaido.

Expanding

Horizons.

Far beyond the horizon, there is an unparalleled and beautiful world.

Composed of regions rich in individuality, blessed with great, wild nature and seasonal foods, Hokkaido reveals a different face each time one visits. Journey and discover a world unlike any you've ever seen.

Niigata

(Sponsored content)

Agricultural sustainability for a growing population

On a sunny weekend during rice-planting season, the people of Japan's largest rice-producing prefecture, Niigata, welcomed ministers and delegates from the 20 major economies of the world as well as six invited countries and eight organizations, as the G20 Niigata Agriculture Ministers' Meeting was held there on May 11 and 12.

At a news conference held on the second day of the event at Toki Messe Niigata Convention Center located in the heart of the city of Niigata, Agriculture Minister Takamori Yoshikawa said that the meeting concluded successfully because of a declaration that aims to ensure the sustainability and productivity of the agri-food sector to feed a growing global population.

"The G20 meeting confirmed the importance of encouraging innovation in agriculture through the utilization of new technologies, including the latest information and communication technologies, artificial intelligence, and robotics," said Yoshikawa.

He also noted that discussions included topics such as developing human resources to include women and younger generations; agro-food value chains; as well as collaborations with nonfarm businesses, the public sector and academia.

"I introduced efforts made by Niigata Prefectural Agricultural College to obtain Global G.A.P. certification as an example of best practice of human resource development during the meeting," said Yoshikawa. The college has engaged its students in the process of obtaining the Global G.A.P., a worldwide standard for good agricultural practices, for the rice and strawberries they produce.

The meeting also confirmed that society needs to tackle issues concerning food loss and waste, measures against food price volatility and animal and plant health at the global level. Participants also confirmed a need to keep striving for alleviating hunger and malnutrition in line with the U.N.'s Sustainable Development Goals.

Students have their say

During the plenary session held on the first day, students from Kohshi Secondary School presented a proposal addressing imbalances in the food supply among advanced and developing countries. "Some countries suffer from food shortages while others face problems surrounding food loss and waste," said one of the presenters, expressing her shock when learning about the tremendous gap between the students' lives and those of the 821 million undernourished people in the world. The students also explained there are many areas in the world where there is not enough water for conventional irrigation systems.

Then, they suggested that drip irrigation can reduce water usage to one-fifth of conventional irrigation use. At the same time, they proposed a bold and novel idea of what they call the "agricultural Olympics" to help solve the financial difficulty in introducing drip irrigation technology. "Developed countries form teams with developing countries with similar climate and geographical conditions, and work together to improve irrigation, promote mechanization and develop infrastructure," a presenter said. This may serve as an opportunity for researchers and providers of advanced technologies to test the full capabilities of new machinery,

products and services and for participating developed countries to win international recognition for their contributions.

'Japan's Farming Village'

At a reception following the first day of summit proceedings, guests sampled various delicacies made using seasonal ingredients from Niigata Prefecture and areas hit hard by the Great East Japan Earthquake such as Fukushima and Miyagi prefectures. Yoshikawa mentioned at a news conference the following day that serving high-quality products from disaster-hit areas was significant in demonstrating their recovery to the world and encouraging ongoing support from the global community.

The theme of the reception was "Japan's Farming Village in Early Summer." Displays and stalls depicted fields, forests, a pond and a farmer's house. Guests enjoyed tea ceremony presentations and picking tomatoes and strawberries.

Niigata Gov. Hideyo Hanazumi greeted guests at the beginning of the reception and highlighted Niigata's significance as one of Japan's major agricultural prefectures in hosting the meet where sustainability of agriculture was discussed. "Niigata continues to try new things in the agricultural sector such as using *yukimuro* (snow rooms) to age and improve the flavor of various foods and has developed a new varietal of rice, Shinnosuke," he said.

Niigata Mayor Yaichi Nakahara made a toast, saying that it was an honor for Niigata as a city with a good balance of advanced urban functionality and rich nature. Koshi no Kanbai Junmai Daiginjo Kinmuku made by Ishimoto Sake Brewery in Niigata was used for the toast.

The area's Restaurant Bus was also there to offer a space for guests to enjoy different foods, such as sweets using local Echigo-hime strawberries. The bus is used in area tours as one element of Niigata's "Gas-tronomy Tourism" campaign, which offers special experiences of Niigata's gourmet, culture and history for tourists.

Reception guests were also treated to displays of traditional and contemporary performing arts originating from the prefecture.

The first performance was Niigata Furu-machi Geigi, a 200-year-old performing art and important cultural legacy drawing from local geisha history, consisting of traditional singing, dancing and music by female professional performers in kimono. The second performance was a dance and Japanese drum parade by participants of the Niigata Soh-Odori, one of Japan's largest dance festivals that started in 2001. Guests enjoyed taking pictures and some even joined in playing *wadaiko* Japanese drums with the performers.

A warm welcome

During the two-day ministerial meeting, local children and volunteers warmly welcomed delegates with flowers and plenty of photo opportunities at Niigata station and airport, the entrance of the meeting venue and other places.

Colorful welcome message cards drawn by children from 37 elementary and junior high schools in Niigata Prefecture decorated a large panel in the atrium. Another panel at the entrance of the venue was adorned with a mosaic made up of about 1,500 photos of Niigata residents smiling,

representatives from all participating countries and organizations took an official photo in front of the panel.

Some of the delegates posted photos and videos on social media to express their delight to people back home.

A MICE destination

The city of Niigata contributed to the success of the event with warm hospitality, efficient traffic control and transportation arrangements, as well as appropriate security both inside and outside the venue, displaying the city's pride and capability as one of the G20 Summit MICE (meetings, incentives, conferences and exhibitions) venues in Japan.

Toki Messe previously hosted the Asia-Pacific Economic Cooperation Ministerial Meeting on Food Security in 2010 and Group of Seven Agricultural Ministers' Meeting in 2016.

Toki Messe stands on what used to be a small island called Bandaijima but is now connected to the mainland. It lies at the mouth of the Shinano River. Japan's longest river that also flows through the city of Niigata into the Sea of Japan. The area has long been prosperous as a port town, especially during the Edo Period to the Meiji Era when it was one of the ports of call for *kitamaebune*, cargo ships that traveled on the Sea of Japan.

The city of Niigata continues to be a key point for transportation, with easy access from Tokyo by shinkansen; via air, it is accessible from many of Japan's major cities including Tokyo, Osaka, Nagoya, Sapporo and Fukuoka as well as from cities overseas including Taipei, China's Harbin and Shanghai, and Seoul.

Toki Messe is five minutes by taxi and 15 minutes by bus from Niigata Station on the JR Joetsu Shinkansen Line. The venue is about 20 minutes on foot from the station, and makes for a pleasant walk during fine weather. It takes about 20 minutes by taxi from the airport to Toki Messe. Buses are also available between the airport and Niigata Station.

The Toki Messe convention complex is comprised of an exhibition hall, 13 conference rooms of various sizes and the Hotel Nikko Niigata. A panoramic view of the city of Niigata with the vast Niigata Plain in the background can be enjoyed from the observatory on the 31st floor of the hotel.

During the G20 Summit ministerial



Thirty-four representatives discussed issues regarding agriculture during the G20 Niigata Agriculture Ministers' Meeting at Toki Messe, Niigata, on May 11 and 12.

meeting, students of Miyaura Junior High School in Niigata offered guests a thorough explanation of Niigata's climate, geography, history, culture and nature as they showed visitors a 360-degree view of the city from the observatory.

Tasty technology

Dozens of companies and organizations set up booths to display their agricultural technologies and products outside the hall where the ministerial meeting took place.

The G20 Niigata Agriculture Ministers' Meeting Promotion Council displayed agricultural, forestry and fishery products of Niigata including 88 kinds of sake, tomatoes and a variety of edamame called *chamame*, mangoes grown in greenhouses heated with hot spring water of 64 degrees Celsius. Various "functional" foods promoted by the prefecture including food processed using high-pressure techniques, food designed to be eaten during disasters and during rescue operations, and low-protein rice for patients with kidney problems were also displayed.

A project featuring smart agriculture conducted in the city of Niigata was also on display. Several companies specializing in new technologies useful in agriculture such as remote sensing systems to monitor crop conditions using satellites and drones, and farm management application for PCs and smartphones collaborated to support the event.

The council also showcased Niigata crafts such as Niigata lacquerware, delicate wood carvings from Murakami and hammered copperware from Tsubame.

Niigata's Shirone district is famous for its giant kite battle, an annual event dating back about 300 years. In the ministerial



rial meeting atrium, two of the giant kites used in actual battles were displayed. There was also a booth introducing Niigata's Sado Island, two-and-a-half hours travel by ferry from Niigata Port. It is a picturesque island blessed with nature that has been designated as a Globally Important Agricultural Heritage System by the Food and Agriculture Organization of the United Nations.

Students of Niigata Prefectural Kaiyo High School had a booth displaying a soy sauce made using local marine ingredients such as salmon and kelp, which they produced with their teachers.

Hands-on fun

Additionally, a field tour took delegates to

several notable locations on May 12.

At the Northern Culture Museum, delegates participated in various cultural experiences including tea ceremony. The museum used to be a private residence of Niigata's wealthy, land-owning Ito family during the Meiji Era (1868-1912). The delegates enjoyed their time as they took commemorative photos with full-blown Japanese wisteria behind them.

The delegates then went to Komehachi, a company that grows rice, soy beans, wheat, vegetables and other produce through smart agriculture utilizing cutting-edge information and communications technology; a demonstration of an unmanned rice-planting machine was among the activities.



Left: Canadian Agriculture and Agri-Food Minister Marie-Claude Bibeau with local children in front of a panel at the entrance of the event venue. Above: A group of Furumachi geigi (geisha based in Niigata) perform at the reception of the G20 Niigata Agriculture Ministers' Meeting.



Representatives of the G20 Niigata Agriculture Ministers' Meeting in front of Toki Messe.



Representatives observe modern agricultural technology in Niigata.

Shiseido on gender equality

(Sponsored content)

A cosmetics giant’s passion for beauty in empowerment

Empowering women has been a crucial philosophy underlying the business and management of Shiseido Co. since its foundation in 1872. Through successive visionary leaders, the company has implemented a number of initiatives to bring out the potential of female workers and improved the working environment for women.

For one, the prestigious Japanese cosmetics maker introduced a maternity and child care leave program in 1990, prior to the enforcement of relevant laws. With over 2,000 employees on average taking maternity and child care leave in addition to working shortened hours each year, Shiseido sees almost all of its female employees return to work afterward.



From left: Kana Minamidate, Eriko Ieda and Yui Takayama of Shiseido Co. YOSHIAKI MIURA

resources and relevant experiences, the Tokyo-based company has driven various efforts to realize a sustainable society and world, particularly in gender equality in relation to Goal 5 of the U.N. Sustainable Development Goals.

Further committing to the goal, Shiseido became the first Japanese firm to sign an agreement with U.N. Women in April 2017.

“Through partnership with U.N. Women, we hope to take action to promote gender equality in Japan, which lags behind in this direction,” explained Eriko Ieda, group manager of the Diversity and Inclusion Department. Out of 149 countries, Japan was ranked 110th in the 2018 Global Gender Gap Index by the World Economic Forum.

Joint efforts in collaboration with the U.N. body resulted in the “Awareness Raising Workshops on Gender Equality,” an educational initiative targeting younger generations, specifically high school students. The program was launched in 2017 on a trial basis.

“We were aware that our business has relatively weak connections with young people. In considering how to reach them, we came up with this idea to collaborate with this generation to tackle social issues with a focus on gender equality,” said Ieda, who leads the Shiseido team organizing the initiative.

In crafting specifics of the program, Ieda said she was surprised to find through interviews that “conventional gender-based stereotypes” still persist among young people.

“We concluded that it’s vital to facilitate a change in such stereotypical ideas in order to prompt concrete actions toward gender equality,” Ieda noted.

Following the trial, Shiseido and U.N. Women expanded the program to full scale in 2018.

The program featured sessions, including “input,” consisting of lectures and discussions to provide basic knowledge; “workshops” at each participating school; “output” presentation opportunities for students to share what they found; and “outcome,” in which behavioral change is expected and encouraged to create social impact. The 2018 program saw the participation of students spanning 25 schools.

Yui Takayama of the Inclusion Group at the Diversity and Inclusion Department, who is also involved in this program, noted that the organizers placed importance on input in order to give opportunities for students to seriously think about their lives and future.

“We wanted them to regard gender issues as their own. Using this opportunity, we hoped that they would think about how they want to live their lives in the society they would create,” Takayama said.

Students apparently learned something valuable through the program. According to Takayama, an Aichi Prefecture high school student whose mother is a full-time homemaker, said her sense of value completely



Left: High school students present their findings and proposal following completion of the Awareness Raising Workshops on Gender Equality. Right: High school students speak with a Shiseido Co. employee as part of the workshop.



changed upon learning the merits of working, including financial benefits.

She and her schoolmates went on to organize a gender education session at their school, using a sort of role-playing game created by them. Ieda said the game was to promote women’s social participation, designed to examine the income difference between households where only a husband works and those in which both spouses do.

“What they found and were most impressed with through the game was the difference in lifetime earnings of ¥200 million between those two households,” Ieda noted.

Ieda and Takayama both said the com-

pany hopes the initiative will help students take action and proactively share what they learned.

“Shiseido seeks to take concrete actions leading to social change,” Ieda stressed. “It’s the younger generation who will take a leading role in the future society. Making a contribution to help realize a society they hope to create, we’d like to establish a system to bring about social change.”

Additionally, Shiseido, through its Prestige brand, is committed to a global charity program that honors influential women working to empower women and girls through education and provides grants to the charity of their choice.

The company’s premier luxury brand Cle de Peau Beaute launched the Power of Radiance Program in March in Tokyo, choosing UNICEF goodwill ambassador Muzoon Almellehan as its inaugural annual award recipient.

This program was in line with the brand concept, “Unlock the power of your radiance,” explained Kana Minamidate, manager of the Communication Planning Group of the Cle de Peau Beaute Brand Unit.

“We’d like to help unlock the radiance of women, which could lead to a substantial social change and create an influential movement,” Minamidate said.

Expanding perspectives in research

What is described as “so Shiseido” by many of its employees is the Shiseido Female Researcher Science Grant program.

Japan’s renowned cosmetics maker, which has long been committed to female empowerment, launched the program in 2007 to “support female researchers eager to play a leading role in science in the future,” said Rumiko Fujiwara, group manager of the Academic Relations Group, who is helping to organize the initiative.

One of the backdrops prompting Shiseido Co. to initiate the effort is Japan’s low ratio of female researchers, Fujiwara explained.

In Japan, the number of female researchers is 150,500, accounting for a record-high

16.2 percent of all researchers, according to the 2018 Survey of Research and Development by the internal affairs ministry. The ratio is still lower than many other countries, including Iceland (47.2 percent in 2016), the United Kingdom (38.6 percent in 2016) and South Korea (20.1 percent in 2017), according to the statistics by the Organisation for Economic Co-operation and Development.

“We believe that backing female researchers and increasing their numbers will lead to the development of Japanese science and technology,” Fujiwara said, referring to the launch of the initiative.

With the target area of research being overall natural science and no age limit in application, the annual program awards 10 recipients with a grant of ¥1 million each.

One of the strong features of this award is that the recipients can use the funds in any way they please as long as it contributes to advancing their research — including hiring a babysitter to look after their child when attending an academic conference,

Fujiwara said.

She noted it would be a waste if female researchers had to give up their projects because of limited support following major life events like having children that can make juggling work-life duties challenging. This is where the program comes in.

Fujiwara, who raised her two children while engaged in research, hopes the program will expand networks of researchers that would benefit science and corporate communities.



The awards ceremony of the 2018 Shiseido Female Researcher Science Grant program

History of support for women at Shiseido Co.

Founder’s promotion of female employees 1872

Founder Arinobu Fukuhara built the foundations of Shiseido Co. from his first business in Tokyo’s Ginza district by incorporating the virtues of his wife and business partner Toki.

Dispatch of beauty consultant overseas 1962

Hisako Nagashima was dispatched to Hong Kong as the first member of the overseas beauty consultant team. Afterward, she was involved in the launch of Shiseido’s overseas businesses in 34 countries.

Opening of Kangarooom Shiodome nursery school 2003

An in-house nursery was established for employees in Tokyo’s Shiodome district. Some slots are open to neighboring firms.

Introduction of Kangaroo Staff System 2007

The Kangaroo Staff System was introduced to support beauty consultants working shorter hours due to taking time off for child care.

Establishment of Kodomology Co. 2017

The company established Kodomology Co. to operate nursery schools on company premises, starting the child care business.

1934 Launch of Miss Shiseido

Nine women were selected for the first Miss Shiseido positions that preceded the company’s current beauty consultants. They advanced beauty expertise and developed as professionals who could respond to consumers’ beauty inquiries at retail shops.

1990 Introduction, expansion of child care leave systems

- Establishment of child care leave system (1990): Available for a total of five years until a child reaches the age of three.
- Establishment of child care time system (1991): Work hours can be adjusted up to two hours per day until a child reaches the third grade of elementary school.

2014 Ranked first in workplace opportunity survey

Shiseido was ranked first for three consecutive years starting 2014 among the “Best 100 Companies Where Women Play an Active Role,” sponsored by Nikkei Woman and the Nikkei Womenomics Project.

2019 Participation in 30% Club Japan

Launched in May, Shiseido joined 30% Club Japan as an advisory board member. The organization is a global campaign founded in the U.K. aiming to achieve sound gender balance in corporate decision-making bodies.

POWER of RADIANCE

“Education is the most potent equalizer of opportunity. And for nations, investing in quality education for children and young people creates the foundation for more peaceful and prosperous families, communities and economies. I will never stop speaking out for those whose voices have been silenced for too long, until every child is in school and learning.”

MUZOON ALMELLEHAN
2019 Power of Radiance Program Award Recipient

THE POWER OF RADIANCE PROGRAM

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The Power of Radiance Program is a multi-year philanthropic commitment that honors inspirational women from around the world whose advocacy for women and girls’ education has led to positive long-term impact on lives. Each year, the Program selects an Award Recipient who receives a grant to be donated to their charity of choice to support educational narratives.

Through this endeavor, Clé de Peau Beauté seeks to empower women and children through the gift of knowledge and learning, and make a tangible difference by igniting radiance within the world.

Power of Radiance Program Website: <https://www.cledepeau-beaute.com/powerofradiance/>

female empowerment

Women’s empowerment equals economic growth

SAYURI DAIMON
STAFF WRITER

For Haruno Yoshida, co-chair of the Women 20 (W20) committee, a G20 engagement group, female empowerment is something like the construction behind Nara Prefecture’s famed ancient wooden Horyuji Temple.

Using a combination of naturally shaped, organic and nonuniform materials — some having become sun-warped and weathered over time — without changing their form, ancient carpenters designed and built the grand monument that dates back to 607 A.D., with the temple, the world’s oldest surviving wooden structure, and its compound now registered as a UNESCO World Heritage site.

“I think a truly sustainable society with diversity is something similar to this ancient method of architecture,” Yoshida told The Japan Times in a recent interview ahead of the G20 Summit slated to begin Friday in Osaka. “In such a society, women should not be forced to change nor behave like men. Just like curved wood, a combination of different individuals, each with unique features, can make up a strong society that can continue for more than a 1,000 years.”

She said women, which account for 50 percent of Earth’s population, have been underutilized until now. “We should use our wisdom to do the best we can to build a stronger and sustainable society, and with this in mind, we held the W20 meeting,” said Yoshida, who along with Yoriko Meguro, professor emeritus of Sophia University, co-chaired the event in March in Tokyo that discussed ways to close the gender gap in society.

The March meeting was jointly held with the 5th World Assembly for Women (WAW!), which was hosted by the Japanese government. Nobel Peace Prize laureate Malala Yousafzai and United Nations High Commissioner for Human Rights Michelle Bachete spoke at the opening session of the two-day conference.

Malala spoke of her hopes that girls’ education will be high on this year’s G20 agenda and urged Prime Minister Shinzo Abe, as the chair of the G20 meeting, to prompt other leaders to commit to new funding to prepare girls for future careers. The G20 aims to reduce the labor force participation gap between men and women to 25 percent by 2025.

As the W20 represents roughly 2.3 bil-



Haruno Yoshida, co-chair of the Women 20 committee, poses for a photo during an interview in Tokyo on June 7.
SATOKO KAWASAKI

lion women in G20 countries, Yoshida initially thought it would be impossible to come up with a common statement that properly addressed the diverse demands of women who come from so many different countries.

“Some places desperately require education. For some women, a job is needed to make ends meet. Other women need a driver’s licence. What happiness means is different everywhere,” the ex-CEO of BT Japan Corp. said.

But Yoshida felt there was a strong bond among the women who represent the 20 countries regardless of cultural and historical differences.

“What was in common among us was just one point, which is the fact that we are women,” said Yoshida. “But because the pain and challenges that we have faced in our lives due to that one point is so powerful, our bond has been made stronger.”

Eventually, the W20 came up with a common understanding that women’s social advancement means economic empowerment, which is also a basic idea of the U.N. Sustainable Development Goals, according to Yoshida.

“We came up with this vision: ‘Women’s empowerment for new prosperity,’” she said. “It can be the new engine for economic growth and no matter where you come from, nobody will disagree with this

concept,” she added.

And when it comes to the economy, it’s the money that counts.

“Through W20 discussions, I felt strongly that money is like blood that circulates around the world,” said Yoshida, who now serves as a Keidanren adviser, which is the biggest business organization in Japan. She is a former vice chair of Keidanren’s Board of Councillors. “I believe that so many problems can be solved if money circulates into every corner of the world,” she said.

Using the example of the Notre Dame Cathedral fire earlier this year, which quickly saw the raising of ¥100 billion in donations in just a few days to pay for repairs to the famed church, Yoshida said that the money is obviously there, but only by calling it to the public’s attention can it be distributed properly to the people in need.

Yoshida also praised Malala, who has raised a lot of money from companies and individuals for the world’s poor.

“Malala is such a powerful girl. She is from a poor family in a poor town in Pakistan.... But now she generates huge amounts of money in every country she visits, and the money she raised will go to education for poor children in Afghanistan and other areas,” she said.

“What is amazing is that she’s got a to-do list in her mind and decides where the funds should be spent next. This money

‘If these decision-makers get the money to spend, they will create a new market. ... If they started to spend money for dinner, fashion and travel, it’s a market women create. That is estimated to be worth ¥100 trillion a year in the U.S.’

HARUNO YOSHIDA

should be spent for this project, and the next one is this. ... So, she is like a dam for new cash flow,” said Yoshida, adding that women should learn from the Notre Dame example and Malala.

Yoshida argues that in the long history of



Nobel Peace Prize laureate Malala Yousafzai gives a speech at the joint conference of W20 and the 5th World Assembly for Women in Tokyo on March 23. KYODO

humankind, people have not thoroughly thought about the value of women’s role in society and why investments should be made in women. In order to get the message out, it is necessary to show the actual figures of women’s contributions to society.

In the case of Japan, thanks to Abenomics, nearly 2.5 million women have entered the nation’s workforce between 2012 and 2017, contributing to a 3 percent increase in the GDP, according to a report by Boston Consulting Group’s think tank BCG Henderson Institute.

Yoshida pointed out the fact that women are the main driving force behind consumer spending, which usually accounts for 60 to 70 percent of GDP.

“I was talking to an auto executive, and he said men do not even have a say in deciding the color of a new car when buying an automobile. If he doesn’t consult his wife, the wife will complain till the car is retired,” she said. “At a supermarket, everything from snacks to toothpaste, it’s the women who decide what to buy.”

Yoshida added, “If these decision-makers get the money to spend, they will create a new market. ... If they started to spend money for dinner, fashion and travel, it’s a market women create. That is estimated to be worth ¥100 trillion a year in the U.S.”

She said that Americans started to recog-

nize that women 25 years and older were the driving force behind these new markets.

When Yoshida traveled to India on a trip with other Japanese businesspeople, she met a female corporate executive. The executive told her that working women are quickly creating new markets in India. When Indian women work for a global company, they will wear a business suit, instead of the traditional sari, and this has created a new clothing market worth tens of trillions of yen in the past five years.

“This kind of story would not even be on the table for discussion if there were only men in the room,” Yoshida said. “If companies want to capture even a fraction of these newly emerging markets, they will want to have someone who understands what women spend their money on. It’s as simple as that,” she said.

Moreover, Yoshida thinks the act of purchasing products means helping others, particularly those who make the products. “Consumption means helping producers with money,” Yoshida said. “Spending money will eventually help improve the lives of people in the area where the products are made, the businesses and the country itself.”

She said the most influential investor that corporate CEOs are afraid of is the consumer. If consumers stop buying their prod-

ucts, they are in trouble. Also, a scary reality in this digital age is that negative rumors can spread quickly around the world.

“I think buying a product is like having the right to vote,” Yoshida said. “By purchasing a particular product, you are expressing your support for the product, the way it’s made or traded. This is especially true for ‘ethical’ or ‘fair-trade’ products.”

She said women themselves should recognize how valuable they are, as their contribution to society and the markets is enormous.

So, instead of merely making demands of the government, Yoshida said women should think about how to communicate better and let people know how valuable it is to have women in higher positions in companies.

And in order to get this issue placed higher on the G20 agenda, Yoshida said that G20 leaders who gather in Osaka should take the initiative to narrow the gender gap.

“We will push ourselves. But just as important for the effort to achieve that end to be successful, (G20) leaders must act. So I want everyone to think about the issue of gender. It should not be a problem of just women nor Japan, but should be the issue that everyone should be on board to tackle,” she said.

Walking the talk on gender equality issues

GABRIELA RAMOS



On Friday in Osaka, Group of 20 leaders will convene to discuss the most pressing global challenges of our time, and that will include women’s empowerment. Prime Minister Shinzo Abe’s wome-

nomics push has certainly impressed many, including myself, since it was announced six years ago.

We have come a long way. Gender equality has also become a key priority for the G20, starting in Brisbane in 2014 when leaders made a strong commitment to reduce the gender gap in labor force participation by 25 percent by 2025. This goal, which was championed by the Japanese sherpa and supported by the Organisation for Economic Co-operation and Development, triggered the work of the G20 and Group of Seven on gender issues, and then the creation of the Women 20. Since then, all the G20 presidencies have tackled a gender angle in their agendas.

For those who argued that gender was not a topic for leaders, the economic case was soon made clear. For all G20 countries, strong, sustainable growth will eventually depend on women developing their full potential. The OECD demonstrated the economic benefits of reducing the gender gap in labor force participation, by bringing 100 more million well-educated women into the workforce (as they are achieving a higher tertiary enrollment rate than men) and offsetting the negative impact of shrinking working-age populations in some G20 countries. Since then, the business case for gender equality has been well established.

Since the commitment was made in 2014, the OECD, together with the International Labour Organization, has been working with the G20 presidencies to monitor countries’ progress in achieving this gender target. And on Saturday at the G20 Summit, the

OECD’s secretary-general will present our report to Abe.

But there is no time to be complacent. As they say, a picture is worth a thousand words, and when you look at the G20 family photo taken at every G20 summit, we are forced to acknowledge an uneasy truth. The number of female political leaders remains extremely low across the world’s major industrialized economies. At most, only four G20 leaders in this annual photo have ever been women. And this is just the tip of the iceberg in illustrating the uphill battle for women in all aspects of society and the economy.

Progress on G20 goal

The good news is that all G20 countries have experienced an increase in the labor force participation of women, with particularly large reductions in the gender gap in Japan, Argentina, Brazil and Korea. In around half of G20 members, the decline in the gender gap is in line with, or better than, the expected decline to meet the target. The actual decline was noticeably greater than the expected decline in Australia, the United Kingdom and Germany.

So the overall story is: Yes we are making progress, but not fast enough, and not everywhere. A much more mixed picture emerges for closing gender gaps in other outcomes, be it representation in certain professions and at managerial levels, career prospects and, of course, in pay, as documented in our report for the G20 leaders. There are indeed many barriers still for women to overcome to reach full equality.

Challenges remain

Gender inequalities are already visible in education. Despite gains in girls’ and women’s educational attainment, girls continue to be underrepresented in the fields of science, technology, engineering and math, as well as information and communication technology. In OECD countries, fewer than 1 in 3 engineering graduates and fewer than 1 in 5 computer science graduates are women. With the future of

work arriving right now, there are further divides as women are massively under-represented in the digital transformation, be it as consumers or producers of these technologies. Across the G20 countries, the share of female ICT specialists still ranges from just 13 to 32 percent. Only 10 percent of innovative startups have been founded by women, and 90 percent of software packages were authored by male-dominated teams. This is the focus for the G20, as our report for the G20 last year illustrated (“Bridging the Digital Gender Divide: Include, Upskill, Innovate”).

The quality of employment is critical, yet women continue to earn substantially less than men in most G20 countries, and little progress has been made over the past decade in closing the gap, which is still at 17 percent on average (between 30 to 35 percent in Korea, India and Japan, and down to about 10 percent or less in France and Italy). This is because women are over-represented in low-paying sectors, such as the care sectors, while men are found in larger numbers in more highly paid jobs, such as the digital sector. Even for work of equal value, women are paid less than men. This should be illegal and corrected through legal provisions, as many countries have started doing. Put in the context of an aging population, overcoming this challenge becomes a more urgent task, as the gender pay gap also leads to a larger gender pension gap. Ensuring equal pay throughout the working lives of women will have a positive cumulative impact on ensuring women’s economic security throughout their lives.

The glass ceiling is no myth. On average, only 1 in 5 board members of the largest publicly listed companies in G20 countries are women. Even in public service, where women are employed in up to 58 percent of jobs, they account for less than a third of senior positions. And, the number of women who occupy ministerial positions is still only 28 percent on average across the OECD. In fact, sexual harassment in the workplace is one of the reasons hin-

dering women from thriving, creating an intimidating environment that discourages women from getting involved in employment or politics.

Progress in closing the gender gaps is so slow because, even when women do work, they are likely to seek less competitive career paths and more flexibility than men with similar qualifications. The most unfortunate finding is that motherhood — despite all its upsides — translates into a financial penalty for many women, contributing to the unequal share of unpaid work and preventing women from engaging fully in the labor market.

Gender equality starts at home

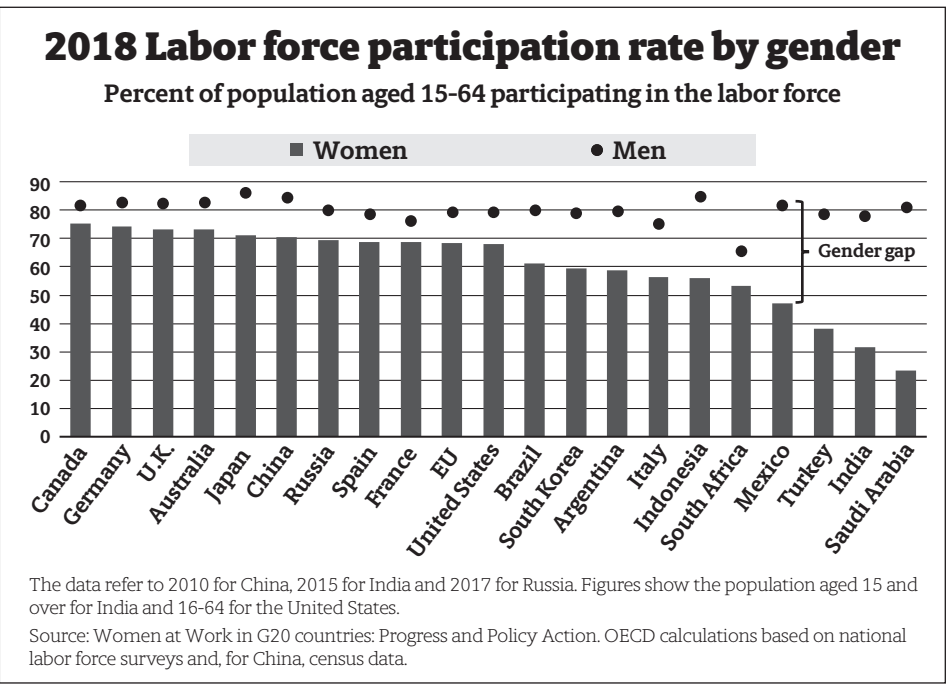
As the OECD’s Social Institutions and Gender Index shows, gender inequalities often stem from deep-rooted and normative gender beliefs. Gender stereotypes and norms are embedded everywhere in our cultures, societies, economies, workplaces and even schools and homes. They determine what women should aspire to, which leads to producing lower levels of ambition and self confidence in our girls, even if they are more educated. For instance, women are still often portrayed as primary caregivers.

In G20 countries, women still carry out the bulk of unpaid care work. And they are more likely to work fewer paid hours, while men are more likely to work very long hours. For example, women’s time devoted to unpaid work ranges from 5 hours and 30 minutes per day in Turkey to 3 hours and 8 minutes in Korea. In contrast, for men, it ranges from 2 hours and 52 minutes per day in Australia to only 31 minutes in India. These gaps are present to varying degrees in all G20 and OECD countries.

This reinforcement of gender stereotyping leads to the perpetuation of discrimination against women in employment opportunities, which translate into unfortunate outcomes as outlined before.

Breaking down stereotypes

We are halfway through to the end date set for achieving the Brisbane goal, and there



is no room for complacency. We need to do more, we need to be smarter, we need to be more effective.

It is clear what tools and policies should be introduced to counter the persisting challenges, be it through anti-discrimination laws, dual parental leave systems, fair sharing of care work, affordable and quality child care facilities and affirmative action.

Most fundamentally, it is clear that we will not deliver the desired outcomes if we do not correct the gender stereotyping that affect both women and men. Schools should be free of materials that nurture gender stereotyping — textbooks, teaching and the national core curriculum need to be gender neutral. Media and social networks also have an important role to play in stopping any gender stereotypical imaging.

We also need something real and positive for girls to look up to. This is why, in 2017, I launched, in collaboration with the Mexican government, the NinaSTEM Puden to involve women role models with successful STEM careers in mentoring, to encourage young girls to take up those subjects and to break down stereotypes.

And we also need men to be involved. Though easy to be overlooked, the same

biased cultural norms that prevent women from fulfilling their full potential might also put a lot of pressure on men to over-perform in a highly competitive environment, and to be incapable of dedicating time to their children. But again, this requires a full transformation of our economies and workplaces to avoid long working hours and allow for better work-life balance, for men and for women.

All put together, we need strong political leadership to “walk the talk.” Leaders lead by example, in the actions that they take and the ambitious national gender equality strategies that they put in place.

Breaking gender barriers, creating equal opportunities for men and women, and encouraging gender equality in the workplace and in public life should not even be an issue in this day and age. It should be the new normal. G20 leaders have an urgent mission to send a strong political signal to empower women and girls.

Gabriela Ramos (@gabramosp on Twitter) is the OECD chief of staff and sherpa to the G20 and G7. A champion of gender equality, she launched the OECD's gender strategy and provided the evidence for G20 members to agree on a gender target to reduce the gap in labor force participation by 25 percent by 2025.

ESG consortium in focus

(Sponsored content)

Suntory: New horizons in recycling

In Japan, most polyethylene terephthalate (PET) bottles are collected and recycled after use. According to The Council for PET Bottle Recycling, Japan's collection rate was 92.2 percent and the country recycled 84.8 percent in fiscal 2017.

According to the council, Europe in comparison as a whole recycled 41.8 percent of plastic bottles and the U.S. 20.9 percent.

However, Suntory Holdings Ltd., a global beverage producer based in Japan, has recently announced a higher and more specific target; that is, to replace all of the PET bottles they use for their beverages with ones made of 100 percent recycled and bio-derived PET by 2030.

"As a major user of PET, we must lead the world in improving the way we make, use and recycle PET," said Takeshi Niinami, president and chief executive officer of Suntory Holdings.

According to Suntory, about 99 percent of the plastic that the company uses on a global scale are for beverages. Approximately 80 percent of the plastic is made of PET.

Suntory continues to engage in international environmental conservation and education to preserve nature and resources for future generations. Tackling the challenge of PET recycling was a natural choice for the company in a time where plastic waste is a major issue.

Plastic did not start out being perceived as inherently evil. Although the material has contributed to the modernization of food hygiene, portability and packaging, its environmental drawbacks are much clearer today.

Suntory believes clever application of plastic is better than eliminating it altogether. But, in that case, how can society be smarter about plastic usage and recycling?

The company said, "It is not just recycling, but recycling with less carbon emissions." The recycling rate is already high in Japan, but the fact that most people may be unaware of is that most of the collected used PET bottles are recycled and become products that are not PET bottles.

According to The Council for PET Bottle Recycling, the amount of PET resin used for manufacturing PET bottles was about 700,000 tons in 2017. However, only 61,300 tons, about 10 percent, is used for making recycled PET bottles, the council said.

The process of used PET bottles to make recycled PET bottles has been technically more difficult. However, petroleum, the main ingredient of the conventional PET, will continue to be exploited if new technologies for bottle-to-bottle recycling are not developed. This is what Suntory is dedicated to.

Suntory's 2R+B strategy is built around reducing plastics and recycling them while

utilizing bio-based, rather than petroleum, materials. This means making bottles thinner and caps shallower to cut down on the amount of PET used, developing petroleum-free PET and processing used bottles with mechanical recycling techniques when making new ones.

There are two ways of recycling PET bottles — one is chemical recycling and

'There are no borders in environmental issues. Cross-border efforts need to be made based on the cooperation among different countries to address the issues. Global enterprises should take the initiative.'

TAKESHI NIINAMI, PRESIDENT AND CEO OF SUNTORY HOLDINGS LTD.

the other is mechanical recycling. Chemical recycling requires a lot of energy as it breaks down PET to a molecular level, while mechanical recycling can handle bigger pieces of PET at the molecular level; this is better in terms of energy consumption, but the bottles need to be cleaned thoroughly before the recycling process begins.

Collecting clean bottles has always been a challenge.

"Those collected by local governments are relatively clean. We will continue to collaborate with local governments, distribution channels and other stakeholders to boost the collection of clean bottles suitable for bottle-to-bottle recycling," noted Kenji Naiki, deputy senior general manager of the Corporate Sustainability Division.

This is harder in countries where collection of used PET bottles has not progressed as much compared to Japan. For example, the collection rate in Europe is two-thirds that of Japan, according to The Council for PET Bottle Recycling. In some countries in Southeast Asia, there is no collection sys-

tem in place.

"Forty-one percent of our PET-bottled products are sold in Japan, 35 percent are distributed to some of the ASEAN (Association of Southeast Asian Nations) countries and 15 percent to Europe. We need to act globally," Naiki said.

Suntory as a whole hopes to address this. Niinami stressed that the company will take initiative in facilitating collaboration among other beverage makers and the distribution industry to support and encourage the government to introduce a collection system in some of the countries where Suntory's products are sold.

"ASEAN countries have close ties with the government of Japan, so we will also approach the government to encourage intergovernmental cooperation in introducing and enhancing the collection system," Niinami said. "There are no borders in environmental issues. Cross-border efforts need to be made based on the cooperation among different countries to address the issues. Global enterprises should take the initiative."

Suntory's efforts toward achieving its 2030 target in Japan will likely serve as a case model for other countries that consume its products.

The company has further developed the mechanical recycling system to include what it calls "FtoP Direct Recycle Technology." This is a newly developed method of turning pieces of used PET-bottle flakes directly into preforms, which are intermediate products that look similar to test tubes, that will later be blow molded into PET bottles.

The conventional way of making preform from flakes involved a process of heating and melting the flakes, crystalizing them and then melting the crystalized pellets again before injecting them into the molds of the preform.

The reason behind the seemingly meaningless process of heating the material twice was because there were two separate machines — one that heats and melts flakes into crystallized pellets and the other that



Takeshi Niinami, president and CEO of Suntory Holdings Ltd., talks about the company's strategy on PET bottles in an interview with The Japan Times in Tokyo on May 30. YOSHIKI MIURA

melts the pellets again to make preforms.

Munehiko Takada, chief specialist of the Packaging Material Department at Suntory Monozukuri Expert Ltd., explained that, "The temperature has to go up to about 300 degrees to melt the material, so it is a major reduction of carbon emissions that we were able to make one machine that does everything, skipping unnecessary steps."

This new technology is said to reduce carbon dioxide emissions by 25 percent compared to mechanical recycling. This contributes to a more than 60 percent reduction in carbon dioxide emissions compared to petroleum-derived PET.

Four companies, Suntory, Kyoei Industry Co. from Japan, Sipa SpA of Italy and EREMA Group GmbH of Austria, collaborated in creating a machine that combines the two processes enabling a shortcut from "flake to preform."

With this new technology, recycling PET bottles has become more efficient and environmentally friendly. However, recycled PET cannot replace the entirety of PET bottles since not all of them are collected or clean enough to be recycled. The quality of

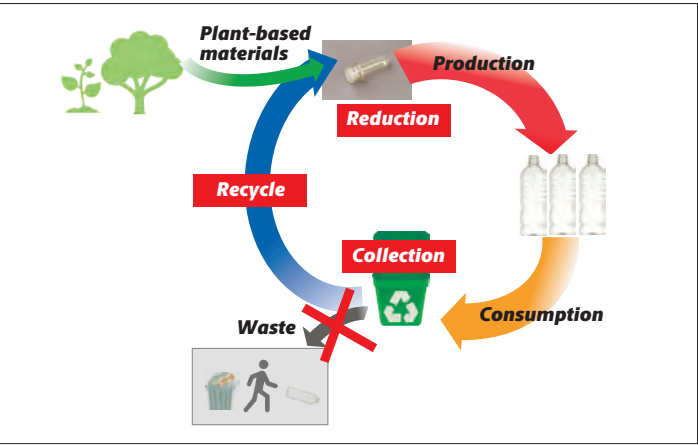
the material — for example, color and viscosity — also changes depending on how many times it has been recycled.

New PET needs to be brought into the recycling cycle to maintain a balance in the quality of materials; Suntory remains dedicated to realizing this environmentally friendly balance.

In 2012, it launched a collaboration with American venture capital firm Anelotech Inc. to make sustainable PET material from wood chips.

Suntory has been investing in Anelotech, which has built a testing plant in Texas, in a bid to introduce the bio-based PET into the recycling cycle to eventually replace all petroleum-based PET. This will not only make the products and the production process greener, but also minimize the impact of oil price fluctuations.

"We have just started to work on research to make PET from waste plastics that are not originally made from PET. As a global company, we will accelerate our efforts with high aspirations to demonstrate good practices that are both environmentally and economically sustainable," Niinami said.



Japan Times ESG Consortium

Showcasing a wide variety of Japanese companies' ESG efforts

Long before the Government Pension Investment Fund — the world's largest pension fund — signed up for the U.N.-backed Principles for Responsible Investment, the philosophy of "sanpō yoshi" has endured as the foundation of Japanese business practices. The term describes a symbiotic relationship between sellers, consumers and society at large.

However, Japanese companies have unfortunately failed to appeal to relevant parties abroad in the realm of

environmental, social and governance (ESG) efforts; this is in relation to companies pursuing the U.N. Sustainable Development Goals and creating shared value, a business concept proposed by academic Michael Porter. This is partly due to the commonly accepted mentality of *intoku* (doing good work behind the scenes).

It is very regrettable the international community has an impression that Japanese companies' ESG efforts are lagging behind because of this.

In order to more widely illustrate ESG management adopted by Japanese companies, The Japan Times launched the ESG Consortium in 2018.

For more information on ESG and notable companies, please visit our website.



<http://jtimes.jp/esg>



Japan Times Satoyama Consortium

Regional communities transforming Japan

The Japan Times has found clues in Japan's rural areas toward solving issues stemming from a low birthrate and an aging population as well as those of urban areas.

Some interesting undertakings and relevant parties that could provide such clues are:

- A group of fishermen revitalizing an area of seabed, once tainted by domestic drainage, using eelgrass and oyster shells
- A former public employee seeking to produce more *urushi* (lacquer) domestically — currently, more than 95 percent is imported — and lacquering electronic goods as part of his efforts

- A mayor who promotes efforts based on the U.N.'s Sustainable Development Goals onsite in municipalities

The Japan Times Satoyama Consortium advocates a new concept of capitalism, which seeks to create a secure and sustainable regional society where local residents provide goods and services of value to untapped resources.



To learn more about these topics and explore a wide range of relevant information, please visit our website.

<http://jtimes.jp/satoyama>

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Kintetsu tourism

Ninja clan of yore and a mountain blanketed in sakura

For inbound travelers seeking traditional, yet one-of-a-kind experiences in Kansai and central Japan, Nara Prefecture and adjacent Mie Prefecture to the east are two areas worth exploring.

What awaits visitors to Nara are sites awash with history throughout the prefecture, in addition to one of the most famous *sakura* (cherry blossom) viewing spots in the country.

Home to the former Japanese capital about 1,300 years ago, the city of Nara in the northern part of the prefecture has a host of interesting destinations accessible via Kintetsu-Nara Station on the Kintetsu Nara Line.

Located five minutes from the station is the spacious Nara Park, featuring the historic Todaiji Temple, Kohfukuji Temple and Kasuga Grand Shrine. All are part of the collective UNESCO World Heritage site Historic Monuments of Ancient Nara, one of three such sites in the prefecture.

There are also around 1,200 deer inhabiting and roaming the park. Iconic in their own right, visitors fawn over the graceful creatures — long protected as the messengers of the gods.

In the central part of the prefecture lies the mountainous Yoshino area, accessible by Kintetsu's Yoshino Line. Representative of the region is Mount Yoshino, where travelers can appreciate the astonishing view of blossoming sakura, with as many as 30,000 trees coloring the 350-meter-tall mountain a pale pink every spring.

The Kii mountain range encompassing Mount Yoshino and neighboring areas in Wakayama and Mie prefectures is the UNESCO World Heritage site known as the Sacred Sites and Pilgrimage Routes in the Kii Mountain Range.

One of the designated locations is the 34-meter-tall Zao-do Hall at Kinpusenji Temple on Mount Yoshino, a hub for practitioners of Shugendo (the syncretic folk religion focused on mountain worship).

Meanwhile, Mie Prefecture, surrounded by both mountains and sea, features a wide variety of destinations that deserve to be further appreciated by Japan-bound travelers.

Home to the sacred Grand Shrines of Ise, the Ise-Shima area in the southeastern part of the prefecture is accessible via Kintetsu's Yamada, Toba and Shima lines depending on the destination.

Visitors to the Grand Shrines of Ise in the city of Ise should be sure to stroll around Oharai-machi, a district developed near the gate of the Naiku (Inner Shrine). The 800-meter stone-paved street has many restaurants and souvenir shops.

The district also has an area called Okage Yokocho that is lined with recreations of historical buildings.

For other historical stops, the northwestern city of Iga — birthplace of the famed Iga ninja clan — has the Ninja Museum of Igaryu. Visitors can learn the school's traditions through exhibitions and a live performance, among other attractions. The

closest station is Uenoshi Station on the Iga Line — affectionately known as the Ninja Line — under Iga Railway Co., a subsidiary of Kintetsu.

In neighboring Nabari is the Akame ravine that is said to have been a training site for Iga ninja. The area is home to waterfalls collectively known as the Akame 48 Falls that can be admired by leisurely hiking a 4-kilometer path. Additionally, a ninja training experience is offered at the Eco-Tourism Center. A bus bound for the area is available from Akameguchi Station on the Kintetsu's Osaka Line.

In touring the two prefectures, visitors can make the most of Kintetsu's discount passes, which include the hub stations of Osaka-Namba, Osaka-Abenobashi, Kyoto and Kintetsu-Nagoya.

The Kintetsu Rail Pass, valid for five consecutive days, offers unlimited rides on all Kintetsu and Iga Railway lines, except limited express trains that require purchasing a separate ticket.

This exclusive pass for international travelers costs ¥3,800 for adults and ¥1,900 for children (six to 11 years old).

For those seeking more transportation options, the Kintetsu Rail Pass Plus, also valid for five consecutive days, is recommended. Available for ¥4,800 for adults and ¥2,400 for children, it also covers several bus lines, including Nara Kotsu Bus Lines Co. and Mie Kotsu Co., on top of unlimited rail travel.



Visitors can watch a ninja performance by costumed actors at the Ninja Museum of Igaryu in Iga, Mie Prefecture.



Oharai-machi is an area with a variety of shops near the gate of the Naiku (Inner Shrine) of the Grand Shrines of Ise in Ise, Mie Prefecture.



Senjudaki Waterfall is in the Akame ravine, featuring waterfalls known as the Akame 48 Falls in Nabari, Mie Prefecture.



Mount Yoshino in Yoshino, Nara Prefecture, is one of the most famous cherry blossom viewing spots in Japan.



The Zao-do Hall at Kinpusenji Temple, a designated World Heritage site on Mount Yoshino in Yoshino, Nara Prefecture



Around 1,200 deer can be found wandering Nara Park in the city of Nara. The park is also home to historic Todaiji Temple, Kohfukuji Temple and Kasuga Grand Shrine — all are part of the UNESCO World Heritage site Historic Monuments of Ancient Nara.

Gourmet cuisine crossed with local flair

Food is an indispensable element in making any trip unforgettable. As far as culinary experiences go, both Mie and Nara prefectures won't disappoint with their many local and traditional delicacies that people of all backgrounds have enjoyed over the years.

Home to a rich marine environment, a variety of prime seafood is available at many restaurants and eateries in Mie.

Thanks to warm and nutrient-rich seawater, Ise Bay produces highly prized *Ise-ebi* (Japanese spiny lobster) that is known for its sweet flavor. Oysters, abalone and

turban shells are other highly regarded marine products the prefecture is known for.

Additionally, visitors should not pass up a chance to try exquisite Matsusaka beef from the city of Matsusaka and neighboring areas.

Regarded as a premier Japanese beef, its meat has a marbled appearance and its fat a low melting point, making steak and sukiyaki two popular ways to serve the beef.

Meanwhile in Nara, *kakinohasushi* is a traditional local cuisine of pressed sushi, which sees lightly marinated salmon and

mackerel placed on rice and wrapped with persimmon leaves. It is said to have originated in the Yoshino area, but is now available in many locations across the prefecture.

Yoshino is also famous for its traditional sweet *kuzumochi*, made using Japanese arrowroot. This jelly-like food is served with sweet *kuromitsu* (dark sugar syrup) and *kinako* (roasted soybean flour).

Other renowned fare includes *narazuke* pickles fermented in sake lees and *Miwa sōmen* (thin white wheat noodles).



Highly prized *Ise-ebi* (Japanese spiny lobster) is caught in Ise Bay in Mie Prefecture.



Exquisite Matsusaka beef for sukiyaki
MIE PREFECTURE TOURISM FEDERATION



Kakinohasushi from Yoshino, Nara Prefecture
YOSHINOYAMA TOURIST ASSOCIATION

Take a break from the G20 Summit in Osaka to see Kansai's stunning scenery!



Mie: The Akame 48 Falls



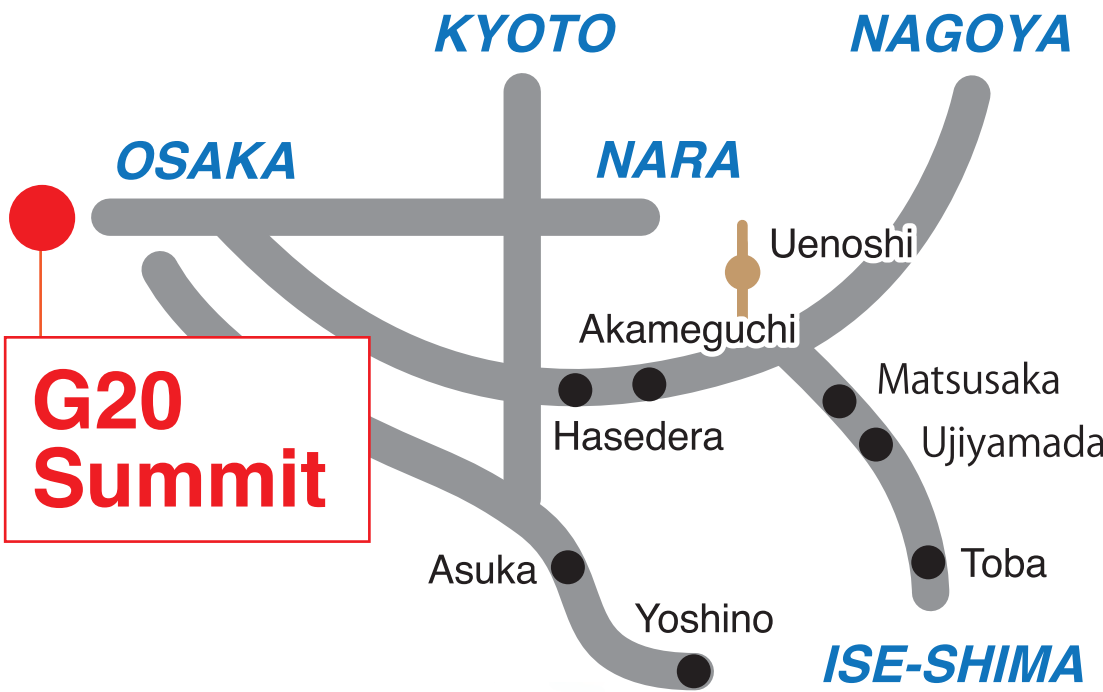
Nara: Asuka's Tanada (terraced rice paddies)



Nara: Hasedera Temple



Mie: Toba's Meoto Iwa (Wedded rocks)



Kintetsu Railway

Search

Setouchi tourism

(Sponsored content)



KAGAWA

Ancient traditions in harmony with contemporary art

Hospitality is woven into the culture of Kagawa Prefecture. For ages, locals have hosted religious devotees traversing the area on *ohenro* (pilgrimages). The trails that cut through the prefecture lead to different *fudasho* — 88 temples across the greater island of Shikoku that offer amulets to the pilgrims who visit them.

The ohenro trails follow the footsteps of famed priest Kobo Daishi who founded Shingon Buddhism in Japan; similar to the Camino de Compostela (the Way of Saint James) in Europe, most avid believers walk the entire route. There are 23 fudasho in Kagawa Prefecture, including the 88th temple that marks the end or beginning of the journey, depending on the direction chosen.



Top: Ritsurin Garden, the largest traditional Japanese garden in the country, boasts a wide variety of flowers and trees. **Above:** Kotohira-gu Shrine is located in Kotohira-cho.

As a hotspot for religion, the Shinto Kotohira-gu Shrine, worshipped as a sea god, is also located in Kagawa. Referred to as Konpira-san by believers, the location is the head shrine that oversees other branches scattered throughout Japan.

The approach to the main building has some 785 stairs, with approximately 1,368 stairs following those that lead to a hidden shrine. Thankfully, although many brave the stairs, there are palanquin-bearers waiting to carry visitors up.

Kotohira-cho, where Kotohira-gu Shrine is located, is known to have the oldest theater in Japan, the Kanamaru-za, where kabuki performances are put on by actors from Tokyo and Osaka. On performance days, flags bearing actors' names line the road to the theater for an extra bit of flair.

Ritsurin Garden, the largest traditional Japanese garden in the country at 185 acres, boasts a great variety of flowers and trees. In addition to paths, visitors can take in the garden's beauty on a *wasen* (traditional Japanese boat) ride.

Kagawa is brimming with art. The islands of Naoshima and Teshima host world-famous art museums and art installations. Of note are the mostly underground Chichu Art Museum on Naoshima, and houses on Naoshima and Inujima that showcase the artists from the island's work, as part of the "Art House Project."

The Teshima Yokoo House, a traditional house renovated into a gallery, is also worth visiting. Most of the area's museums were built to blend in with the scenery of the islands, something immediately apparent with the Teshima Art Museum.

Another unique space on Teshima is "Les Archives du Coeur" by Christian Boltanski, an artist whose work is often themed around life and death. There, visitors can listen to audio recordings of heartbeats Boltanski has been collecting from around the world since 2008. Other major museums in the area are the Kagawa Prefectural Higashiyama Kaii Setouchi Art Museum and the Isamu Noguchi Garden Museum Japan.

For visitors heading to the region this year, the Setouchi Triennale 2019 is taking place. Held once every three years, 12 islands and two ports of the Seto Inland Sea set up art installations in three sessions to cover spring, summer and fall.

In terms of literature, many older Japanese know Shodoshima — the second-largest island in Setouchi — as the main setting of Sakae Tsuboi's 1952 bestseller, "Niju-shi no Hitomi" ("Twenty-four eyes"). The story centers around an elementary school teacher and her 12 students during the turbulent years before and following World War II.

Shodoshima and other small islands in the area are also the source of unique culinary traditions and products such as *somen* (thin wheat noodles) and olive oil. Shodoshima is also known for soy sauce and their old storehouses. The tra-



Islands of the Seto Inland Sea welcome visitors with an abundance of art, including the Setouchi Triennale.

ditional method of making soy sauce has remained in this area, in an endeavor to hand down the traditional soy sauce used in Japanese cuisine to future generations.

Lastly, visitors cannot forget to sample a Kagawa staple — Sanuki *udon* (thick white wheat noodles). Udon is a hearty meal, and Sanuki udon is known for its full, chewy texture. It is also very nutritious, and many Japanese eat udon when trying to recover from a cold, much like how Westerners seek out chicken soup.

There are approximately 650 noodle restaurants — most small businesses — in the prefecture alone that serve this regional specialty. It is so popular that there are taxi companies that host udon-themed tours, where drivers will take participants to each of their favorite restaurants.

At an udon restaurant, the owner is viewed as an artisan. Oftentimes, they make both the noodles and stock from scratch. The stock typically uses small fish and other ingredients to bring out umami with a hint of soy sauce for taste. The shops vary in how they serve customers; some are full-service, and others are self-service. Some shops even have a garden outside where diners go out and can choose their own toppings for themselves.

After receiving a fresh bowl of udon at the counter, customers add condiments and then pour hot stock from a pot to create their customized meal. The different services, along with different takes on udon, are something to enjoy and compare when hopping from restaurant to restaurant.



Sanuki udon (thick, white wheat noodles) is a specialty of Kagawa Prefecture.

In Kagawa, a bowl of udon usually costs only ¥150, or only a bit more. For restaurant owners, it's less about turning a profit and more about seeing the community happy and fed — in a sense, one could say udon is a way for owners to express goodwill and hospitality. This welcoming atmosphere paired with authentic cuisine makes digging into Sanuki udon a one-of-a-kind experience.

The prefecture's impeccable hospitality, food culture and coexistence between ancient tradition and forward-looking appreciation of all mediums of art are testament to the countless adventures that await. As the locals would say, "Kagawa ni kimai" ("please come to Kagawa").

■ **Access to Takamatsu**
From Tokyo: 1 hour and 20 minutes by plane
From Osaka: 1 hour and 50 minutes by train
From Hiroshima: 1 hour and 50 minutes by train
■ **URL:** <https://www.my-kagawa.jp/en/>

OKAYAMA

Ario Kurashiki

Options aplenty at diverse shopping center

Ario Kurashiki is a large-scale shopping mall connected to the North Exit of JR Kurashiki Station. It is located on the opposite side of the historical Kurashiki area, adjacent to Mitsui Outlet Park.

The mall has more than 100 specialty shops including a household appliance discount store, supermarket, drug store, shoe shop and various apparel boutiques. Many locals frequent it for everyday shopping.

For those looking to bring back a little bit of Japan for friends and family, there is a ¥100 shop, bookstore and a souvenir shop inside the supermarket. Of note is Tenmaya Furusato Kan with local dishes sealed in vacuum packs.

Ario Kurashiki is also the place to find affordable, delicious



Above: *Nigiri* from Sushi Maru, a rotating sushi bar known for serving the best of freshly caught Setouchi seafood from local fish markets. **Left:** *Demi-katsudon* (pork cutlets on rice with demi-glace sauce) is an 80-year-old Okayama delicacy that can now be found at Ario Kurashiki's Katsudon Jokamachi.



The clock tower by the North Exit of JR Kurashiki Station. Ario Kurashiki is a short walk from the station via the overpass.

food in a tourist area known for crowded eateries. There are more than 30 shops at the food court on the first and second floors. Ramen, *tonkatsu* (deep-fried pork cutlets), sushi and *tendon* (a fried prawn on a bowl of rice) can be found along with Chinese and Indian food, as well as McDonald's.

As for international and kid-friendliness, Chinese-language maps are available at the information counter. Children can play at the outdoor park or try out the latest arcade games, rides and other amusements at Kids Plaza Kyarando.

A tax-free service is available at several stores, with Muji, Kanda jewelers and baby and children's goods store Akachan Honpo among them. Whether it's to find fun souvenirs, have a filling meal or chill out with free Wi-Fi, Ario Kurashiki has plenty to explore.

■ **URL:** <http://www.ario-kurashiki.jp/>
■ **ADDRESS:** 12-2 Kotobuki-cho, Kurashiki, Okayama Pref.
■ **OPEN:** 10 a.m.-9 p.m. (Ario Mall), 11 a.m.-10 p.m. (restaurants)
Shop opening hours may vary

EHIME

Dogo Onsen

Hot spring's 'rebirth' meets classic manga

Dogo Onsen is believed to be one of the oldest *onsen* (hot springs) in Japan, with its history said to date back 3,000 years.

There are many legends from ancient times when the lord of the time established public baths for nobility and commoners. The Dogo Onsen Honkan is the emblem of the area; its impressive facade was built in the 19th century and is designated as an Important Cultural Property. Today, it is open to locals and travelers alike as a public bath.



Above: Dogo Onsen Honkan's sister facility, Dogo Onsen Annex Asuka-no-Yu, was inspired by the Asuka Period. **Right:** Visiting Matsuyama Castle and a soak in the nearby hot spring are popular activities for both tourists and locals.



Dogo Onsen Honkan is currently under renovation, officially dubbed the DOGO REBORN PROJECT, but remains open to the public.

Dogo Onsen Honkan began renovations in January, while continuing to operate as a public bath, drawing enthusiasts who appreciate the history, beauty and healing effects of the legendary facility. During the renovation period, the onsen is holding a collaborative event honoring and incorporating manga legend Osamu Tezuka's "Hinotori" ("Phoenix") with Dogo Onsen's own rebirth. In addition to other elements, the DOGO REBORN PROJECT involves an original animated short and wall art installations in the area.

Dogo Onsen is 25 minutes away via the Iyotetsu Tram from Matsuyama Station, or 40 minutes by bus from Matsuyama Airport. As a storied location, Dogo Onsen not only seeks to celebrate its history, but also pursues innovation; this makes it an excellent way for travelers to immerse themselves in Japan's bathing culture.

■ **URL:** <http://matsuyama-sightseeing.com>
■ **ADDRESS:** 5-6 Dogo Yunomachi, Matsuyama, Ehime Pref.
■ **TEL:** 089-921-5141

Setouchi, Sanin tourism

(Sponsored content)



SETOUCHI-MATSUYAMA TOURIST PROMOTION CONFERENCE

Island-hopping in search of history and literary giants

Setouchi is an area around the Seto Inland Sea. Located west of Osaka and Kyoto, the region's major cities of Hiroshima and Matsuyama are connected by a chain of small islands.

When journeying to Hiroshima, visiting the Atomic Bomb Dome in remembrance of the August 6, 1945, tragedy is a sobering, yet essential experience, as is setting time aside for the Hiroshima Peace Memorial Museum, where global leaders have visited to pray for the victims and peace. The museum has just wrapped up major renovations, with new exhibitions focusing on the suffering of victims and their families.

Kure Naval Base, which is also known as Kure Chinju-fu, was established in 1889 in Kure, which led to the rapid growth of the city. Later Kure Naval Arsenal was opened and many battleships were built, as well as weapons. The largest battleship in the world, Yamato, was built at the arsenal. Toward the end of World War II, Kure became the target of air raids and was greatly damaged. Today, however, Kure has come to flourish again with shipbuilding, steelmaking and other industries, retaining some remnants from the past. The Yamato Museum and the JMSDF Kure Museum (Submarine Museum) show the history of Kure and the wartime life of the people, both of which attract many visitors from home and abroad.

Moving westward from Hiroshima is the city of Hatsukaichi. A 30-minute train ride and a 10-minute ferry ride will take visitors to Miyajima, an island home to Itsukushima Shrine. Itsukushima's iconic red torii rising from the sea has long welcomed travelers. The shrine's history stretches back roughly 1,400 years to the Asuka Period.

However, the O-torii gate is currently being restored, so sadly the world-famous view is temporarily closed to the public. However, the Miyajima ropeway is a breathtaking alternative with a panoramic view of the Seto Inland Sea and Hiroshima. Autumn is particularly inspiring — the maple leaves turn red as though the mountain has caught fire.

There are many delicacies to thrill the palate, but *anago-don* (rice bowl with



The Seto Inland Sea

conger eel) is a must when in Miyajima. Seafood and desserts are abundant in Miyajima, with seasonal oysters and *momiji-manju* (maple leaf-shaped buns filled with red bean paste) being among the highlights. In terms of nonedible souvenirs, traditional woodcrafts such as Miyajima-*shakushi* (wooden ladies) and Miyajima-*bori* (wood carvings) are ideal souvenirs.

On the topic of taste buds, no trip to Hiroshima is complete without trying the areas take on *okonomiyaki* (savory Japanese pancake). Ramen or udon noodles are often sandwiched between an impressive layering of thin savory crepes, cabbage and other sliced vegetables, meat or seafood and a fried egg. As with Osaka, local pride in Hiroshima's cuisine is strong and many will argue that their interpretation is the "true" version of the dish. Regardless of who's "right," diners are the true winners when faced with this filling feast.

There are two options when traveling out of Hiroshima toward Matsuyama — road or sea. There is the Shimanami Kaido, a 60-kilometer-long bridge connecting Hiroshima and Ehime prefectures via Onomichi and Imabari. This route is



The luxury cruise ship Sea Paseo will make its debut in August.



Clockwise from top left: The 125-year-old Dogo Onsen Honkan in Matsuyama; Mount Misen in Miyajima; The renovated Hiroshima Peace Memorial Museum; The Yamato Museum that introduces the history of war, science and technology.

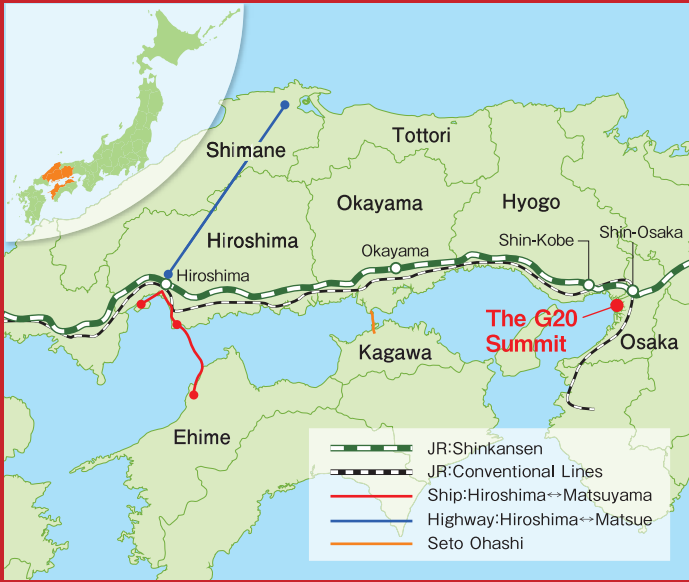
very popular with cyclists and hikers, but the drawback of this route applies to those traveling by car; drivers will miss out on most of the sights.

This is where the sea route comes in. There are a variety of boat services that connect Hiroshima and Matsuyama. The Super Jet (around 68 minutes) and ferry (roughly 160 minutes) are both convenient and relaxing — not many would pass up a chance to unwind above the waves while looking out over unforgettable scenery. Also, although the Super Jet is for passengers only, cars can be loaded on ferries.

For those looking for high-end cruises, Sea Paseo, a luxury cruise ship complete with gazebos and a food court debuts in August. After docking at Matsuyama Kanko Port, travelers will find themselves in the city of Matsuyama, the setting of Natsume Soseki's novel "Botchan." For avid fans of the literary figure, a ride on the Botchan train — a restored steam locomotive as "small as a matchbox" — is akin to a brief journey into the Meiji Era (1868-1912).

There is also a Botchan-themed marionette clock near Dogo Onsen Station. Every hour from 8 a.m. to 10 p.m., characters from the novel come to life and can be seen from one of the nearby *ashiyu* foot baths. There are many *ashiyu* in the area — a welcome respite for those exploring on foot.

Other famous aspects of Matsuyama are Dogo Onsen and haiku. The hot springs area is currently collaborating with manga giant Osamu Tezuka, and the streets have been transformed into an art exhibition. New projects for the new era, one might say.



Setouchi is not far from The G20 Summit venue in Osaka, with easy and convenient access. It is rich in nature, culture and history. Sanin is also recommended and can be reached easily either by train or bus from Hiroshima as well as central Chugoku and Shikoku. Journey to these areas to discover a richer side of Japan with local hot springs, historic sites and superb views.

Photos provided by Okayama, Tottori, Shimane, Hiroshima, Ehime, and Kagawa prefectures

SANIN REGION

Matsue Castle and Mount Daisen

Luck and longevity in the realm of the gods

The Sanin region, known for literary figures such as Lafcadio Hearn (Yakumo Koizumi), is easily accessible from Hiroshima.

To visit the area, laden with cultural attractions, there is a highway bus that operates daily, ferrying people between Hiroshima and Matsue. Additionally, from April 1 to March 31, 2020, there will be a campaign allowing international travelers to venture on this roughly three-hour ride for ¥500.

The home of Japan's gods — with references dating back to "Kojiki," often touted as Japan's oldest history book — Izumo Shrine is known for *en-musubi*, or bestowing good luck in the quest for romance. Matsue Castle, designated a national treasure in 2015, is another hefty attraction, standing as one of 12 remaining *tenshu-kaku* (castle towers) in Japan. Further to the east stands the 1,709-meter-tall Mount Daisen — a symbol of the region

Above: Daisen-Oki National Park is the symbol of Tottori Prefecture. The breathtaking landscape frames Mount Daisen, which is listed in Kyuya Fukada's book "100 Famous Japanese Mountains." Right: Inasa Beach is believed to be the sacred meeting spot of the innumerable gods that are said to gather every year at Izumo Shrine. It is among the "Top 100 Beaches of Japan."



Matsue Castle is recognized as one of Japan's national treasures. The park surrounding the castle is also designated as a historic monument and appears regularly in such rankings as "Japan's Top 100 Cherry Blossom Viewing Sites" and "Japan's Top 100 Historical Parks."

known for its stunning scenery throughout the year.

For art lovers, Sanin is an ideal destination. Mizuki Shigeru Road, named after the prolific *yokai* (monster) manga giant, is a glimpse into the spookier side of Japan. The Adachi Museum of Art, with its 1,500 pieces of modern and post-modern Japanese art, is the only Japanese museum to obtain three stars from the Michelin Guide. Its garden was awarded first prize by "The Journal of Japanese Gardening" for 16 years in a row.

Kaika Onsen, the name of which means "everybody" and "life" is an ocean hot spring. Those who bathe in its waters are believed to live longer, thanks to its healing and aesthetic qualities. As far as food is concerned, Matsubagani (crab) is a high-end winter delicacy with a firm sweetness.

Affordable, accessible and alluring, there is much to experience in Sanin for those from Japan and beyond.

■ URL: <https://www.japan-guide.com/ad/sanin/> (Lake Nakamura, Lake Shinji and Mt. Daisen Area Tourism Office)
■ ADDRESS: 1793 Yumachi, Tamayu-cho, Matsue, Shimane Pref. (Inside Matsue City Hall, Tamayu Branch)
■ TEL: 0852-55-5057

SHIMANE

Hotel Chorakuen

Sweeping onsen wreathed in verdant repose

With a history of around 1,300 years, the Tamatsukuri Onsen area is home to an abundance of hot spring *ryokan* (traditional Japanese inns).

Among them is Hotel Chorakuen, which has been in business for over 150 years and is famous for its massive hot spring. The spa area's water is 100 percent pure, free-flowing spring water and is known as "*kami no yu*," or "water of the gods" for its supposed health benefits and purifying properties.

The Ryugu-no-yu bath is the pride of the hotel. The open-air mixed bath spans some 396 square meters and is the largest of its kind in Japan. By wearing designated bathing attire, guests can bathe together, regardless of gender, while surrounded by the verdant beauty of the garden.

The size of Chorakuen's traditional garden is 33,000 square meters, complete with a pond,

Above: Chorakuen's 33,000-square-meter garden is frequently recognized in the U.S.-based Journal of Japanese Gardening. Right: Enjoy a sumptuous *kaiseki* (traditional multicourse cuisine) feast that incorporates seasonal ingredients from both the mountains and sea.



Men and women bathe together in Ryugu-no-yu wearing bathing clothes provided by the inn.

greenery and blossoms of the season, and white *tamajari* gravel; an atmosphere perfect for strolling through in a *yukata* (lightweight kimono). Special guest rooms are located across the garden, each with their very own private open-air baths.

Japanese *kaiseki* (traditional multicourse cuisine) is carefully prepared for guests, using seafood from nearby waters and the best of the season from the Izumo area. Dinner plans incorporating local Shimane-*gyu* beef are especially popular, with guests tucking into a divine combination of beef and local sake.

For those traveling westward, a stop at Chorakuen to wind down with friends and family in a sweeping hot spring wreathed in lovingly cultivated nature is a must.

■ URL: <https://www.choraku.co.jp/>
■ ADDRESS: 323 Tamatsukuri, Tamayu-cho, Matsue, Shimane Pref.
■ TEL: 0120-62-0171
■ OPEN: 3 p.m.-10 a.m.

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André Calantzopoulos, CEO of Philip Morris International, wants his company to stop selling cigarettes.

If you're serious about getting people to stop smoking, why not just stop selling cigarettes today?

If Philip Morris International stops selling cigarettes today, it won't make a difference. Smokers will simply pick up another cigarette brand. More than 1 billion people are smoking today and, according to the World Health Organization, there will still be more than 1 billion people who choose to smoke in 2025. After decades of evidence about the damage that smoking does, there is an ongoing societal responsibility toward smokers to illustrate solutions for quitting — and, for those who don't quit, to provide less harmful alternatives. So we decided to work on developing science-based and technology-driven products that would be better alternatives for the men and women who would otherwise continue smoking cigarettes. And once we — our leaders, our scientists, and our board — were confident that we were on the right track and our products had the right potential to switch smokers, we went all in.

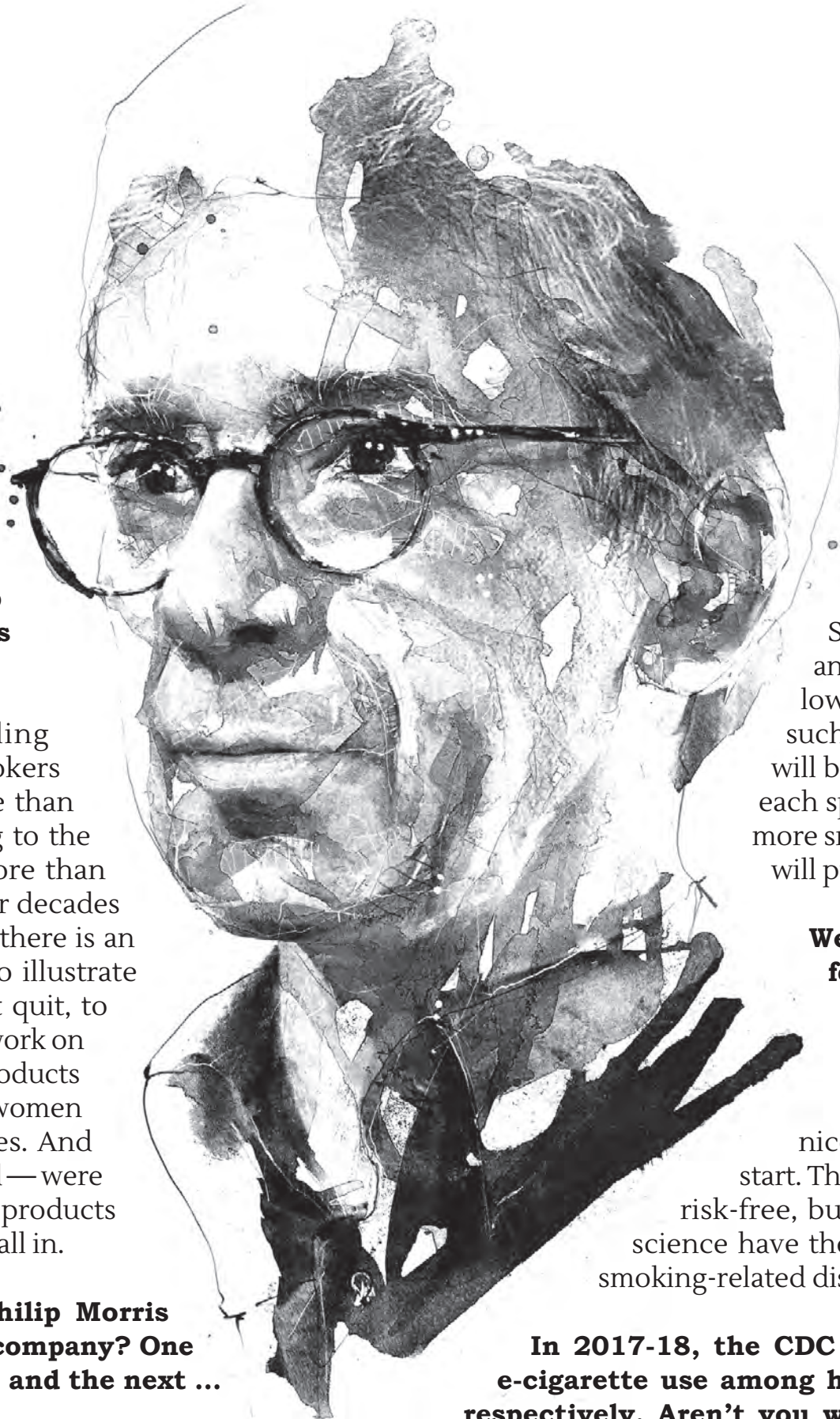
You've spoken of a 180-degree turn that Philip Morris International is making. How about within the company? One day, your scientists are working on cigarettes, and the next ...

In fact, most of the scientists who worked on this project are new to the company. All of them are passionate about creating meaningful solutions for people who smoke. They came to us because they believe they can change something, so they can do some good in the world. That's doubly important because whatever we say is going to come under enormous scrutiny. Do you think anyone will give us a third chance? Either we deliver — or we're done.

Why are smoke-free products in some countries but not others? What are the barriers to entry?

I never thought I would end up becoming a bigger advocate for alternatives to continued smoking than many of our detractors, but here I am. Let me give you an example: In Japan, where smokers have access to smoke-free products and information about them, more than 6 million smokers have stopped smoking and switched to smoke-free products. That's 22 percent of the country's smokers!

One of the barriers to scientific acceptance comes from this strict ideology: "Cigarettes are harmful, so all tobacco and nicotine products must be just as bad." So the first challenge is to eliminate the ideological shortcut that says all tobacco products are equally harmful. There is no perfect tobacco product, but they're not all the same. Yes, nicotine is addictive, but the U.S. FDA and other agencies agree that nicotine is not the primary cause of tobacco-related diseases. Rather, it's the high levels of harmful chemicals in the smoke of a burning cigarette.



Smoke-free products do not burn the tobacco, and because of this we expect to see significantly lower levels of harmful chemicals generated by such products. Whether this proves to be the case will be a matter to be assessed through science for each specific product. I'm hopeful that as more and more smokers demand better alternatives, regulators will put the right regulatory frameworks in place.

We hear the term "reduced risk" being used for such products — are they not completely safe?

The best choice for smokers concerned about their health is to quit tobacco and nicotine use altogether — or, better yet, never start. That's our message. Smoke-free products are not risk-free, but we believe that those that are backed by science have the potential to reduce the risk of developing smoking-related diseases compared to continued smoking.

In 2017-18, the CDC reported a 78 and 48 percent jump in e-cigarette use among high school and middle school students, respectively. Aren't you worried that teens will want to try your device?

I've told my teenage children that smoking is absolutely forbidden — that they should not use nicotine products, period. We are focused on responsibly marketing our products and making sure they are not sold or promoted to minors in the countries we are in. We will continue to do so in all of our markets.

You've said your ambition "is to move to switch people out of cigarettes as soon as possible." How long do you think that will take?

I don't think we'll see a completely smoke-free world within 10 to 15 years. These things take time. But with cooperation between industry and governments to allow access to accurate and non-misleading information about better alternatives to smoking, we can certainly accelerate the arrival of the smoke-free world. And if, on a population level, innovative products can make a positive impact, isn't that a benefit we must make possible? And soon?

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PHILIP MORRIS INTERNATIONAL

taste of Kansai

Food hub boasts traditional flavors, open-minded spirit

JANE KITAGAWA
CONTRIBUTING WRITER

When a city's being is inextricably linked to the maxim, "To eat oneself into ruin" (*kuidaore*), it's a foregone conclusion that the city is serious about its food. Such is the case of Osaka, Japan's second-largest city and gateway to the Kansai region.

Historical factors

Osaka's disposition for all things culinary stems from a location that has provided access to high-quality ingredients, its mercantile history, and being close to the ocean and waterway trade, explained Aiko Tanaka, professor of food studies at Osaka Shoin Women's University and author of "Food Studies of Osaka: From Paddy Field to Our Chopsticks."

"The mountains surrounding Osaka are

the source of high-grade soft water, which is most effective at extracting the umami and flavor components from *kombu* (kelp) to make dashi," she said, describing the Kansai region's preference for making Japan's versatile and subtly flavored sea stock. The variety of kelp favored in Kansai is ma kombu, harvested in southern Hokkaido, which was traditionally shipped to the region by *kitamaebune* cargo ships following the Edo Period (1603-1868).

An abundance of local vegetables including Naniwa varieties (Naniwa being an olden name for Osaka), as well as easy access to fresh and bountiful seafood from the Seto Inland Sea, also played a part in the prefecture developing its rich food culture according to Tanaka.

The city's mercantile past was no less important, she noted, as it formed a signif-

icant role in Osaka becoming what could be described as the epicurean epicenter of Japan. Trade saw Osaka become a storehouse for rice and the city earned the moniker of the nation's kitchen — *tenka no daidokoro*. Merchants would take their customers out to restaurants for both entertainment and business purposes in lieu of dining at home.

"Osaka was designated as a 'special economic zone' in the Edo Period," Tanaka said. "Located away from the central government and overt religious and political pressure, the city gave birth to popular civilian food in the broad sense, with Osaka cuisine created and perfected by the 'people' of Osaka themselves."

The role of soy in local cuisine

Because the Kansai region has traditionally favored a lighter style of dashi than that of areas in eastern Japan, there is also a preference for a light-colored soy sauce, *usukuchi shōyu*. A precursor to soy sauce, tamari — said to be a liquid byproduct of miso production and derived only from soybeans with no wheat added — was first produced in Yuasa, Wakayama Prefecture, around the 16th century.

Usukuchi shōyu's roots can also be traced to Kansai, specifically Tatsuno in Hyogo Prefecture around 1660. The lighter colored soy sauce features a higher salt content than regular soy sauce (*koikuchi shōyu*) that is more commonly used in Tokyo and the Kanto area.

Because usukuchi soy sauce is said to impart a delicate flavor to dishes, and its lighter color does not interfere with other ingredients, it was predominately used in Kansai's *shōjin ryōri* (traditional vegetarian Buddhist cuisine) and *kaiseki ryōri*, a traditional multicourse meal initially based on



There are a variety of shōyu across Japan, each one having a distinct flavor and color that helps define local tastes and dishes. GETTY IMAGES

meals served before a tea ceremony.

While usukuchi shōyu has since become a common ingredient used in cooking, it is not necessarily limited to cooking in Kansai cuisine, according to a spokesperson from major soy sauce manufacturer Kikkoman, which is based in Chiba but maintains a factory in the Kansai region.

Instead, most Kansai households tend to use different soy sauces depending on the dish. Usukuchi soy sauce is said to enhance the natural color and taste of vegetables, fresh produce, and dishes such as udon noodles and *dashimaki tamago* (rolled omelet cooked with dashi), while regular, darker soy sauce pairs well with the Kansai region's famous Kobe beef, the spokesperson added.

Popular dishes and locales

Today, an increasing influx of overseas visitors to Osaka is becoming familiar with popular local dishes such as *okonomiyaki* (Japanese savory pancakes), *takoyaki* (octopus dumplings) and *udon* (thick, white wheat noodles). Such flour-based dishes are known as *konamon*, said Tanaka, a type of *B-kyū gurume* (affordable, quality meals) originally served as quick, easy and hearty meals to a burgeoning population of *shitamachi* (downtown) laborers in Shinsekai and similar areas.

Other soul food-esque dishes such as *kushikatsu* (deep-fried skewered meat and vegetables), *doteyaki* (beef sinew stewed using miso, sweet sake, and sugar) have similar origins. Shinsekai is still the

most authentic spot to indulge in some *kushikatsu* today, with plenty of the suburb's inexpensive restaurants around Tsutenkaku Tower serving up the local specialty.

The lively Dotonbori area and nearby Ura-Namba in Osaka's southern Minami district are home to a heavy concentration of casual *okonomiyaki* and *takoyaki* restaurants. Ura-Namba is fast developing a reputation as a hotspot for its bars, bistros and other eateries, the area springing to life in the evening. Cooking utensils and knives are sold at Doguyasuji close by.

Those interested in professional cooking knives are recommended to visit Osaka prefecture's southern port city of Sakai. Boasting a roughly 600-year-old history as a renowned manufacturer of quality metalware, the city is one of the five major knife-producing centers in Japan.

Other areas in central Osaka known for their dining options include Tenma, with its warren of alleyways and street front restaurants, and glitzy Kitashinchi. The latter is not far from Umeda and has been described as "the Ginza of Osaka" for its concentration of top-tier and Michelin-starred restaurants.

Many of these comprise of a more intimate form of *kaiseki* dining, the counter-style *kappo ryōri*, which is said to have originated in Osaka during the 1920s. Diners watch the *itamae* (chef) prepare and cook their meals, perhaps discussing the seasonality of the ingredients used, cooking techniques and customer preferences.

Meeting diner preferences

A current culinary opportunity, where catering to diverse customer preferences is of utmost importance, is Osaka's reaction to halal cuisine needs. Increasing numbers of visitors to Japan hail from predominantly Muslim countries such as Indonesia and Malaysia, and these tourists need dining options where they don't need to worry about the use of cooking alcohol such as *mirin*, or pork.

One place where diners can order halal snacks such as seafood grilled in butter is the bustling Kuromon Ichiba market that boasts over 180 food wholesalers and retailers. Government organizations such as the Japan National Tourist Association and private sector halal media groups have all established websites and other resources for Muslim travelers.

Kikkoman, who released a gluten-free halal soy sauce in 2017, is also stepping up to meet consumer needs. The sauce was made in the same way as regular soy sauces via a pure-brewing method. While Kikkoman said it was difficult to reproduce a product devoid of flour albeit with the same rich flavor profile of regular soy sauce, feedback on the product has been overwhelmingly positive. The firm is constantly striving to deepen understanding regarding halal foods among its workers to maintain its halal qualifications and certification.


"A huge number of visitors to Osaka hail from Asia," said Tanaka. "Repeat visitors (are) now venturing deeper into Kansai, particularly Nara and Wakayama prefectures." Meeting tourists' needs was key, she said, noting that Osaka's open-minded spirit would definitely assist in this.



Halal dining options have been growing to accommodate the increasing amount of Muslim travelers. GETTY IMAGES



Osaka's soft water is said to effectively extract the umami flavor from ingredients. GETTY IMAGES



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HOTEL VISCHIO KYOTO



Takoyaki (octopus dumplings) is one of the many popular local dishes of Osaka that many overseas visitors are becoming familiar with. GETTY IMAGES



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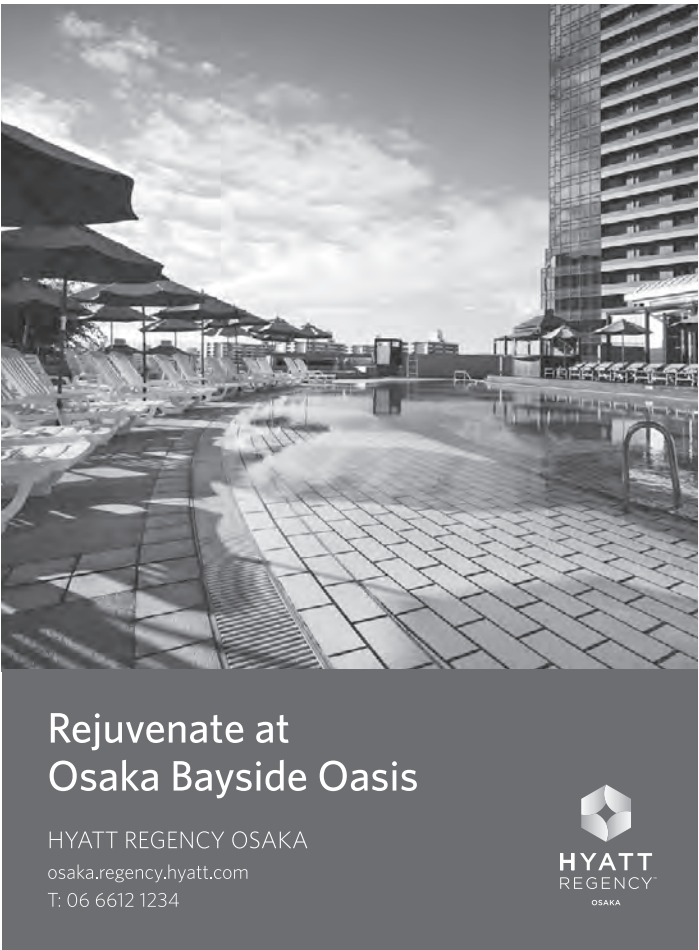
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Eco-friendly financing for a more sustainable world

MAIKO MURAOKA
CONTRIBUTING WRITER

The Green Finance Network Japan (GFNJ) was established late last year with the aim to make green finance mainstream in Japan's financial market.

Green finance is a term often used to refer to the ways of financing and investing that are more environmental or sustainable, which has been becoming a global trend since the Paris agreement was signed in 2016.

Hideki Takada, secretary general of GFNJ and counsellor of IR (Integrated Resort) Promotion, Government of Japan, came across the idea of green finance when he was assigned by the Ministry of Finance as a senior policy analyst of the Green Finance and Investment at the Organization for Economic Co-operation and Development (OECD) in Paris from 2015 until the summer of 2018.

"Japan was a slow starter in green finance. It has been gaining momentum over the past one to two years," said Takada. He met main players of green finance from around the world through his career at the OECD. "I wanted to maintain and utilize the extensive network I built there, even after I returned to Japan to work in other fields within the government," he said.

Takada consequently set up GFNJ with two other founders, Takejiro Sueyoshi, CEO of Green Finance Organization Japan and special advisor to the United Nations Environment Programme—Finance Initiative in the Asia-Pacific region, and Rintaro

Tamaki, president of the Japan Center for International Finance and former deputy secretary-general of the OECD.

GFNJ organizes events and symposiums on green finance, gathers and shares information on various green finance activities conducted by its members and outside the organization, and provides a platform for connecting Japanese and international stakeholders.

The group is made up of more than 120

'Japan tends to make a late start in many fields, but it is often because we want to be fully convinced before we kick start. We have been through the process of pursuing logic and confirming matters systematically when we actually put something into practice. I think this is Japan's strength'

individuals from over 70 organizations including government ministries and agencies, private companies, academic institutions, local municipalities, financial institutions, international organizations, think tanks, media and nongovernmental organizations. GFNJ members vary in age, but Takada explained that professionals account for a sizable proportion of the network, which he hopes will drive rapid changes based on a common awareness of issues.

"The members belong to GFNJ as individuals, instead of representing an organization or company. This allows for open discussions and continuation of relationships across all sectors," said Takada.

GFNJ serves as a platform for building long-lasting, person-to-person connections as a starting point to bring about bigger changes across all sectors. This is because bureaucrats are regularly transferred to different sections of the government. The contents of their work and people they work with tend to change after a few years. The same can be said for many private companies.

This is one of the causes of vertical divisions among different areas because cross-sectoral relationships and exchanges do not continue or mature. GFNJ serves as a platform for building long-lasting person-to-person connections as a starting point to bring about bigger changes across all sectors.

GFNJ also provides channels to and from key persons in the public and private sectors as well as financial and academic institutions from around the world. The organization's broad network serves as a gateway for foreign government officials and other key players in green finance who are looking for their counterparts in Japan. "Japan is receiving global attention now due to the size of, and capacity for its green finance market to grow," said Takada.

For example, green bonds are a financial instrument in green finance whose issuance increased dramatically in Japan in the last few years. According to market analysis published in February by the Climate

Bonds Initiative, a major NGO and the first in the world concerning green bonds, Japan's green bond market is the 12th-largest in the world and second-largest in the Asia-Pacific region.

The Environment Ministry launched Japanese Green Bond Guidelines in 2017 to ensure transparency and integrity in the fast-growing market. The ministry also introduced the Financial Support Programme for Green Bond Issuance in 2018 to offer subsidies that partially cover the issuance cost of green bonds.

"From a global perspective, this kind of governmental initiative is quite groundbreaking because green bonds in the rest of the world, especially Europe, have been led mainly by the market and the private sector," said Takada. GFNJ aims to facilitate effective learning from looking at the various approaches taken by different countries.

"Japan tends to make a late start in many fields, but it is often because we want to be fully convinced before we kick-start. We have been through the process of pursuing logic and confirming matters systematically when we actually put something into practice. I think this is Japan's strength," said Takada.

Another advantage in Japan is that individuals tend to adhere to high moral and ethical standards. While economic and market values may be green finance's most powerful driver in some countries, "Japan's national character may see an ethical approach being more effective. There may be social messages that only Japan can transmit to the world," said Takada.

The high level of individual ethics and standards is reflected in investment decisions at the personal level. "The Tokyo Metropolitan Government offered some of its green bonds to individual investors for the first time in 2017, and they were sold out within a day," said Takada. "I think there is latent demand for making greener



Hideki Takada, secretary general of GFNJ YOSHIAKI MIURA

choices in investment. It is, in a sense, a democratic way of participating in green finance."

As part of its outreach to individuals, GFNJ organizes and sponsors events to promote and share information on green finance. The first two symposiums held in November 2018 and May 2019 featured speakers from diverse sectors. Approximately 200 participants attended the seminars. "Our network smooths channels among organizations. We want to help companies succeed and overcome their

various hurdles," said Takada.

In addition to green bonds, green finance covers diverse environmental topics from climate change and conservation of biodiversity and marine resources to food loss and circular economy. Both individuals and organizations are becoming increasingly concerned and interested in such topics. "I hope that Japan will take initiative in some of the fields where we are ahead of the rest of the world," said Takada.

Investment based on environment, social and governance (ESG) factors is also gaining increased recognition. The Government Pension Investment Fund in Japan, the world's largest pension fund, has announced that it will incorporate ESG factors in all of its investments.

Takada also stated that gatherings among the private sector, municipalities and NGOs are equally important as intergovernmental meetings such as the G20 Summit. "All of the countries share the same awareness of global issues, but it takes time to form consensus on each topic and take action," he said. Private companies, financial institutions, local governments and the like are more flexible, and accelerating their efforts and involvements in green finance. "We expect that notice of their achievements will reach the leaders of the G20, and we want to be part of the force to boost the governments' efforts in green finance," said Takada.



More than 200 people attended the Green Finance symposium organized by GFNJ in Tokyo on May 18. DAISUKE TAKOH



Japan's green finance market is steadily increasing. GETTY IMAGES

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universities' role in global society



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Universities lure foreign students on falling population

CHISATO TANAKA
STAFF WRITER

Universities conducting classes in English, intellectual debates between foreign and Japanese students where new ideas are created — these are just some of the things the central government envisions for the nation's higher education in order to become a magnet for talented researchers and students alike.

It also makes sense from a business standpoint and would help universities, which are suffering from a decline in their student bodies due to depopulation.

The education ministry has conducted various policy attempts to find such a solution, including increasing the number of classes taught in English and helping graduates secure jobs, but Japan has yet to come up with a game-changer to attract more foreign students.

In fiscal 2018, 298,980 foreign students came to Japan to study, up 77.8 percent from fiscal 2013, according to a survey conducted by quasi-governmental Japan Student Services Organization (JASSO).

At first glance, Japan is on course to achieve its goal of attracting 300,000 foreign students by 2020. But a closer look shows the actual increase is the result of the rising number of foreign students at Japanese language schools.

The number of foreign students studying at Japanese language schools was 90,079 in fiscal 2018, nearly triple the figure of 32,626 in fiscal 2013, according to the survey. The number of foreign students enrolled in universities, junior colleges or technical colleges was 87,806 in fiscal 2018, edging up from 69,339 in fiscal 2013.

"The increase of foreign students (in universities and colleges) is moderate compared with that of foreign students in lan-

guage schools," said Mitsuru Maruoka, a deputy director for student exchange at the education ministry. "We still have to work on increasing the ratio of foreign students enrolled in universities."

According to data published by the Organisation for Economic Co-operation and Development (OECD), international undergraduate students accounted for an average 2.5 percent of student populations at Japanese universities in 2016, well below the OECD average of 4.9 percent.

The ratio of foreign students is also a key factor in global university rankings compiled by Times Higher Education (THE), as

well as Quacquarelli Symonds (QS). Japan is aiming to get 10 universities ranked in the top 100 by 2023. But in 2019, only two universities — the University of Tokyo and Kyoto University — made it into the THE ranking, while five made the cut for the QS ranking.

One of the lesser known projects funded by the ministry to attract elite foreign students includes the Study in Japan Global Network Project, a global recruiting project in which the ministry uses Japanese universities' overseas offices as information centers in the key regions of Russia, the Middle East, Southeast Asia, Southwest Asia, Africa

and South America.

The project's staff members visit local high schools to recruit students and follow up on those who have returned from studying in Japan in an effort to build a network of Japan-educated alumni.

To ensure foreign students have a comfortable living environment in Japan, the ministry also offers scholarships, around 11,000 of which will be awarded in fiscal 2019 — ¥117,000 a month for undergraduates and ¥144,000 for graduate students.

But the biggest obstacle preventing Japanese universities from realizing their global ambitions is the language barrier. The ministry aims to introduce more classes taught solely in English as well as the number of professors who can give lectures in English.

Launched in 2014, the Top Global University Project subsidizes 37 select universities based on their proposals to promote internationalization. While each university has its own agenda, the fundamental requirement is to double the number of lectures taught in English as well as the number of foreign students by fiscal 2023 compared with the year before the project started.

So far, the project has been successful in boosting the number of classes taught in English. In fiscal 2016, the number of such classes was 32,806, surpassing the government's goal of 27,339. But the figures were still short for the number of foreign professors working at universities and Japanese professors who acquired degrees outside of Japan.

But even if there were more foreign students coming to Japan to study at universities where more classes are conducted in English, the question still remains as to whether the efforts will bear fruit in terms of students securing jobs in Japan.

According to a JASSO study released in fiscal 2017, 65 percent of foreign undergradu-

ate students in Japan wanted to work in the nation after graduation, but only 35 percent found a job. One of the biggest reasons for the low figure was that Japanese companies expect foreign students to be able to speak Japanese fluently, the education ministry's Maruoka said.

Most Japanese companies require them to have passed the highest level of the Japanese-Language Proficiency Test, the N1, but that still might not be enough, he said.

"It's not just the language. It's hard for foreign students to understand the way Japanese companies operate and the way they hire employees," said Maruoka, adding lectures on the hiring practices in Japan and how companies operate should be made available.

To improve the situation, the ministry has introduced a program that offers foreign students a variety of business training sessions — including monthlong internships aimed at improving their employment prospects — in cooperation with universities, municipalities, and private organizations.

In 2018, 12 major Japanese universities participated in the project, creating tie-ups

with over 100 registered companies.

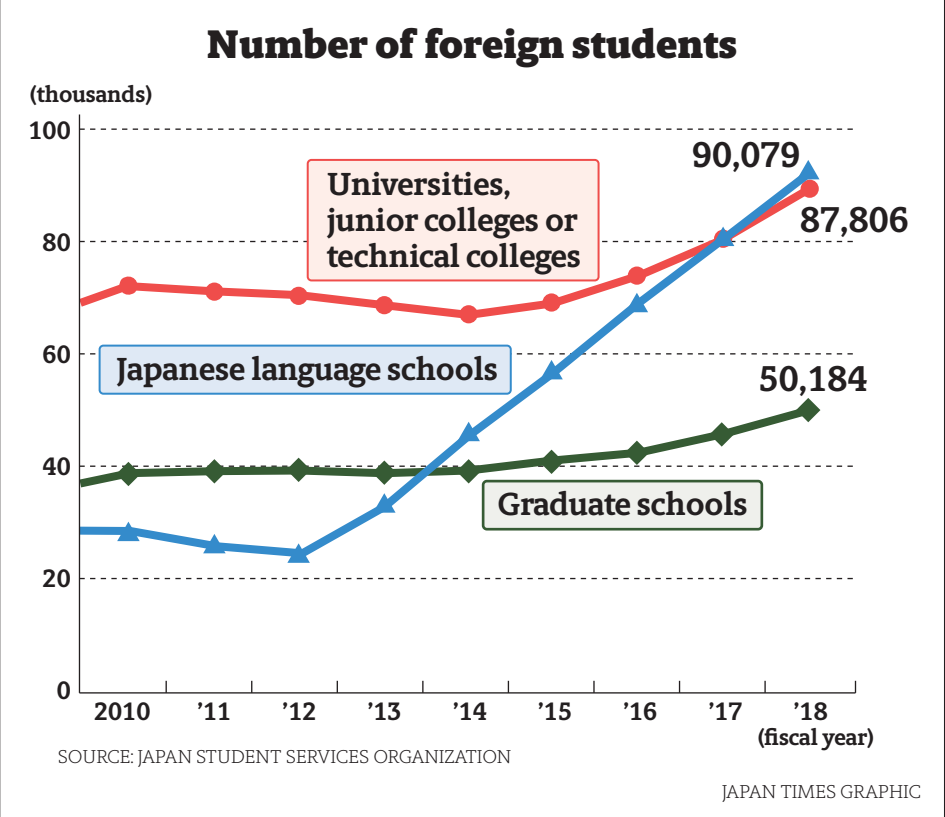
The ministry is also making it easier for foreign students to switch to work visas after graduation and asking companies to ease Japanese language skill requirements.

Michio Kitamura, a professor specialized in international public relations at Hokkaido University, said that, first and foremost, each university needs to beef up its recruiting skills if they want to draw more foreign students — especially by polishing up their websites.

"The website is the very first gate to a university, and foreign students would not choose it if they are not convinced of the benefits," he said.

Kitamura also reiterated the importance and the need for universities to create a system that helps foreign students overcome the language barrier.

"Even if the number of applicants increases, if their Japanese skills are not sufficient they will not be accepted," said Kitamura. "Universities need to give foreign students extra time to study the language, and the introduction of a support system (to assist their studies) is crucial."



The next eight pages feature eight universities with programs and services for foreign students and other programs to foster those who can be successful in the global arena. The Japan Times interviewed the presidents of Chuo University, Doshisha University, Keio University, Ritsumeikan University, Soka University, Sophia University, Toyo University and Waseda University.

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Chuo University

An aim to foster global competence

Chuo University has long been renowned for being at the forefront of practical learning. In 2015 and upon celebrating its 130th anniversary since its founding, the school drew up the “Chuo Vision 2025” action plan in the pursuit of establishing a stronger global presence and competency.

Changing mission, role

Chuo President Tadahiko Fukuhara stressed that the changing role and mission of universities such as Chuo was behind the development of Chuo Vision 2025. He noted that the academic sector in Japan was now at the forefront of a transition period. He pointed out how universities were once a place of top learning where history and tradition were passed down to following generations. Universities also served as a platform for learning about the latest knowledge in various fields. “But with the progress of information technology, artificial intelligence can now conduct searches on numerous topics that were once accessible only through academic studies and research at universities. These conditions today in turn are prompting changes in the role of universities,” he noted.

Fukuhara said that the mission of a university is therefore developing individuals capable of exploiting an innovative and bright future society, and that the goal of Chuo today is to produce professionals who can think and act globally. “Of note here is that a ‘professional’ is different from an ‘expert.’ While a person can become an expert by reading a manual and following its instructions, a professional must be creative and have the awareness to discover the true meaning of an existing problem on their own. Put another way, each person must

have the ability to think about various solutions and choose the best approach through the smart use of AI,” he said.

This is one reason why each lecture at Chuo has now been extended to 100 minutes from previous 90-minute slots, allowing students to have ample time to think and discuss problems that have no specific, clear answers. Consequently, students can refine their skills to scrutinize, learn and make decisions on their own.

In today’s society that is not only unpredictable but changes with enormous speed, nobody knows the “right” answer. To successfully proceed through such an era of uncertainty, each person’s ability to think independently is more vital than ever before. “Hence, during their four years at Chuo, I hope all our students will develop their own ability their own strength to think strategically toward the future,” Fukuhara said.

Four pillars of development

Chuo Vision 2025 is a mid to long-term plan comprised of four basic approaches. “First is the reorganization and establishment of our educational organization. In that vein, we established two new faculties this April: The Faculty of Global Management at our Tama Campus, and the Faculty of Global Informatics at our Ichigaya Tamachi Campus,” said Fukuhara. As a result of this move, Chuo has come to offer 26 courses for undergraduate students at its eight faculties.

The second pillar of the development plan is the expansion and innovation of campuses to best realize the functions and attractiveness of the university’s Tama and urban campuses. The university is further consolidating the already modern facilities

of its vast Tama Campus in verdant western Tokyo to attract more students from around the world. The Law Faculty will move from the Tama Campus in Hachioji to the university’s downtown campuses located around the Korakuen area.

Third is Chuo University’s strategy to reinforce its global education and research actions, in order to enhance its presence in the global academic arena. Chuo plans to accept an annual total of 1,000 overseas students by the year 2025, while dispatching 2,200 Chuo students yearly to foreign countries within the same period.

“In order to foster global-standard professionals, we also started the Global Faculty-Linkage Program in 2018. This is an all-school international education program conducted in English that fuses practical learning with overseas business experience. It is a program that is offered to all students from the second semester of their first-year of schooling,” explained Fukuhara.

The fourth pillar is Chuo’s efforts to promote sports. In addition to academia, Chuo stresses athletic achievement. As a member of the Japan Association for University Athletics and Sport, it has high hopes of sending students who excel in various sports to the 2020 Tokyo Olympics and Paralympics. Regarding next year’s Olympics, Chuo University received interest from a regional organization of national Olympic committees that the Tama Campus be used as their preliminary training ground, since Tama is the only university campus in Japan that has a concentration of modern pentathlon facilities — horseback riding, swimming, fencing, shooting and running — in one place. “I think such an opportunity to welcome top Olym-

pic athletes from outside Japan will offer an excellent stimulus to our students,” Fukuhara observed.

Nurturing global citizens

As for the type of student Chuo wants to attract, Fukuhara emphasized competency. “In the so-called Society 5.0, it is not enough to only be literate and digest the necessary information from whatever is available. Instead, our students need to use their knowledge and skills and develop competence in proactively and creatively tackling issues that are yet to appear,” he said. Fukuhara believes that such competency is vital in order for individuals to lead the world from a global perspective, and that the spirit and mind needed to nurture the ability to execute and apply any acquired intelligence boils down to broadening competency.

He continued that Chuo’s present stance falls in line with the globalization efforts of the 18 young people who founded Chuo’s preceding English Law School in 1885. The youths visited various countries and fostered their skills in applying any acquired knowledge into practice. “I must point out here, however, that our students today must have further courage to tackle issues that cannot be solved merely from the experience and learning obtained from our predecessors. What is required is the will to use their own wisdom and competency to exploit a bright future, while contributing to establish a sustainable society for mankind,” noted Fukuhara.

Taking this view, the school provides overseas internship opportunities, as well as chances for students to apply global learning in Japan. One example is a collaborative relationship with The Japan International Cooperation Agency (JICA) in managing an internship project in Vietnam. There, Chuo’s law students are dispatched to JICA’s office in Hanoi to receive lectures on uniform application of law within the country, research on



Chuo University President Tadahiko Fukuhara YOSHIAKI MIURA

specific topics, and attend a seminar held at the Supreme People’s Procuracy, Vietnam.

New facilities

Concurrent with such moves, Chuo University is now establishing new facilities in Japan. Scheduled to open in April 2020, the “Global Building and International Education Residence Hall” near the on-campus monorail station at Tama will serve as a platform for conducting global education research. These facilities will also allow the school’s Japanese and foreign students to

truly become “global” by studying and living together. “Such an experience will definitely contribute to enhance mutual understanding of different cultures, tradition, customs and food,” Fukuhara commented.

The construction of another building for shared use by all faculties is further proof of “going global.” Scheduled to open in 2021 at the Tama Campus, this cross-faculty building will serve as the nucleus of Chuo’s global diversity zone, as well as a place of learning and exchange among its students. “Put another way, this will become an arena that concentrates our knowledge, learning and intelligence through true globalization,” explained Fukuhara.

President’s philosophy

“Education and research are unchangeable aims of universities. However, bold change of its missions and role in line with social development is also a vital university’s duty. Following founding spirit -fostering the ability to apply knowledge to practice- Chuo keeps challenging,” Fukuhara concluded.

Chuo University

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Chuo University’s Tama Campus amid the verdant surrounds of Hachioji, western Tokyo CHUO UNIVERSITY



A rendering of the university’s new dormitory and research hall CHUO UNIVERSITY

Chuo’s two new faculties to promote further internationalization

Society is undergoing dynamic changes and so that its students can “Be ahead of the world,” Chuo University has introduced two new courses to best enable today’s learners become tomorrow’s leaders.

Faculty of Global Management

Established in April 2019, the Faculty of Global Management provides students with a practical education focused on global business where English is used as the main language of instruction over a four-year period.

More than 70 percent of the classes at this faculty are conducted in English. These classes begin with several essential required subjects that provide a solid foundation of

learning about global business. Students also receive guidance about writing reports and participating in debates in English.

Non-native English speakers are placed in level appropriate academic English classes, where they read professional papers to increase their understanding of management terminology, as well as practice writing English language academic essays and reports.

Further subjects allow students to finesse the higher-level language skills needed for international success when communicating, negotiating or consulting in business settings. Students can choose from English or Chinese options.

To provide each student with opportunities to acquire the deep expertise required for demonstrating leadership, the Faculty of Global Management also offers specialized educational courses focusing on the mechanisms behind the global market activities of companies and organizations. At the same time, regional studies comprised of in-depth research on the history, politics, economy, culture and consumer trends of Japan, China and other Asian regions, or Europe, the U.S. and Latin America empower students with the practical knowledge to perform as global managers.

Additionally, all first-year students take part in a short-term overseas study program of three to four weeks in such destinations as North America and Asia, incorporating lectures, discussions, company visits and other activities in English. From their second year onward, students are expected to become independent learners. Participating in overseas internships and field studies, as well as commencing their own research through seminars are just a few of the ways that students can develop their investigative skills, build experience and enhance cross-cultural understanding.

The result of studying at the Faculty of Global Management is the confidence to take the initiative in the global business arena. Students can reap the benefits of Chuo University’s practical education opportunities, while expanding their chances of becoming true new global leaders.

Faculty of Global Informatics

Also opened in April 2019, Chuo University’s Faculty of Global Informatics is truly one-of-a-kind: Japan’s only course offering that fuses information and communication technology (ICT) studies with ICT’s ethical, legal and social impacts. Specifically, it aims to equip students with both an international understanding of and the professional skills needed to navigate the intersection between information systems and law in today’s globally connected society.

As a result of the rapid advances made in ICT, the world is experiencing unprecedented social change. Under such conditions, various ICT-legal issues must be tackled on a global scale and for this to be successful an understanding of different cultures, languages, religions and social backgrounds is paramount.

As such, students of the Faculty of Global Informatics study informatics and law within an integrated humanities and science framework.

First-year students at this faculty learn the basics of informatics such as the framework of the internet, programming and artificial intelligence and how they connect people. Basic legal knowledge covering information and the Constitution, civil and criminal laws is also taught.

In the second year, broader knowledge is acquired through lectures on information security theory, operating systems and hardware, and system management in addition to on-site application practicum. Also gained



Facial recognition technology at the Faculty of Global Informatics CHUO UNIVERSITY

during second year is knowledge of various information-related laws on AI and robotics, privacy, personal information protection and copyright. Opportunities such as learning practical informatics-related English and studying universal human values are also provided for second-year students to polish their global “readiness.”

From the third year onward, students build their theoretical knowledge and acquire know-how of informatics execution and development. This includes research on such themes as digital media and contents, innovation and technology, as well as public communications service. On the legal side,

highlights include the global application of information-related laws and understanding of the global issues surrounding information society, including national security, diplomatic policy, ICT policy of various countries, and diversity studies.

The Faculty of Global Informatics is located at Chuo University’s Ichigaya Tamachi Campus, the area itself a cradle for information exchange. Industry, government and academic leaders all contribute practically to faculty courses so that graduating students become invaluable global information strategists, well equipped to help solve IT-related problems that evolve over time.



Students make use of the Faculty of Global Management Lounge. CHUO UNIVERSITY

Doshisha University

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Global education centered around a sound philosophy

In 1864, when 21-year-old Nijijima Jo defied a ban on overseas travel and smuggled himself aboard a Boston-bound boat, he set off on a mission.

The son of a samurai in a period of isolationism, Nijijima was determined to look beyond the *rangaku* Western learning texts he'd read in Japan and experience these philosophies and scientific findings for himself.

When he returned home a decade later, he brought with him a bachelor's degree from Amherst College in Massachusetts (the first ever awarded to a Japanese), a new name — Joseph Hardy Neesima — and became a delegate to learn about education systems in Europe and the U.S. He was also an interpreter for the delegates.

He also had \$5,000 he'd raised to help fulfill his dream of establishing an educational institution with a difference.

A year later, he opened Doshisha Academy — present-day Doshisha University — and the rest, as they say, is history.

The purpose for the institution's founding, Neesima wrote, was not only to encourage students to learn the English language, but also "to cultivate students ... who are able to put their conscience into practice." This is something he believed could not be achieved "through intellectual education" alone.

The cultivating of students through an "education of conscience" would have been seen as a revolutionary concept at the time,

and remains a core element of the Kyoto-based university's educational philosophy to this day, said Doshisha University President Takashi Matsuoka.

"Upon his return to Japan, Neesima was determined to change society through cultivating people who embraced his idea of using one's abilities as conscience dictates," said Matsuoka, a Doshisha alumnus who holds the position of professor of materials engineering at the university.

"To that end, he planned to create an educational environment, based on Christian principles, that encouraged liberalism through independent thinking and actions. Moreover, another founding philosophy was internationalism, to see the world with a broad perspective," he said.

Even taking into account his considerable foresight, it's unlikely Neesima could have envisaged the degree to which Doshisha has flourished over the intervening years.

In 1879, the institution's first graduates numbered just enough to form a rugby team — 15. Exactly 140 years later, there are nearly 30,000 undergraduate and research students at two main campuses that boast a combined 14 faculties and 16 graduate schools.

Global reach

What probably would have impressed him more, however, is the degree to which Doshisha has embraced his views on internationalism, particularly over the past decade.

During that time, Doshisha has been selected for the Global 30 and Go Global Japan Project, which were initiated by the

government to advance globalization in Japanese universities.

Furthermore, the university has established the Institute for the Liberal Arts (ILA) — where all classes in its four-year liberal arts program are held in English. Of the university's 1,500 international students, nearly 20 percent study at the ILA. Also, the university has established the Faculty of Global Communications and the Faculty of Global and Regional Studies, which require students to study abroad as a prerequisite to obtaining degrees.

And while domestic offerings have become increasingly internationalized, as of this spring Doshisha has also been able to offer semester programs abroad through its first overseas campus.

The Doshisha EU Campus at Tubingen University is located on the grounds of the world-renowned University of Tubingen in Germany, with which Doshisha has cooperated in a student exchange program going back almost 30 years, underlined by the opening of the Tubingen University Center for Japanese Language (at Doshisha University) in 1993.

"All at once, Doshisha has grown into a university offering a truly global education," said Matsuoka, who became president in 2016. "Less than a decade has passed (since the formation of these new departments and learning centers), but it's exciting to think about how these courses will be appraised and what kind of impact the students who graduate from them will make as they make their way in the world."

The new facilities are all part of the incremental steps that the university has continued to take in an attempt to realize not only Neesima's desire to better society, but also his view that it would take 200 years to satisfactorily formulate a university and a sound educational philosophy.

Indeed, as Doshisha heads toward 2025 and the 150th anniversary of its founding, it has implemented a wide-ranging program that serves as another big stride toward that objective.

Vision 2025

Titled "Vision 2025," the program incorporates six so-called visions, including a commitment to pioneering new learning methods and further evolving internationalism. Each aims to help students attain their goals as "Doshisha-jin" — namely, those who uphold Neesima's conscience-based principle and at the same time endeavor to become more globally aware.

"Those visions may appear unconnected, but are in fact like six spokes of a wheel, with the student at the center," he said. "By carefully joining them together we can better achieve our goal of cultivating talented people who can effectively contribute to the needs of society."

According to Matsuoka, a determination to "advance creativity and collaboration in research" is the most important and he believes it is key to further advancing the university's international image.



Doshisha University President Takashi Matsuoka ROBGILHOOPLY

Matsuoka believes that the Doshisha EU Campus at Tubingen University will also serve as a hub for faculty exchanges and research collaboration not just between scholars and scientists from Doshisha and Tubingen, but also other universities throughout Europe and beyond.

He also feels that educational activities will not be limited to the comparative study of Japan, Germany and Europe, but cover a much broader spectrum of fields, including global studies and the "study of conscience."

In the same vein, it will also provide a fertile base for interdisciplinary research, much as Doshisha in Kyoto has instigated through its Space-DREAM (Doshisha Research Project for Active Life in Space Engineering and Medical Biology) Project. The university introduced it last year to integrate various fields, such as science and engineering, sports health science and neuroscience, creating a platform for interdisciplinary research on how to prolong life expectancies and overall health through researching space-related biomedical engineering.

According to Matsuoka, the Space-DREAM Project is intended as a base for

international collaborative research that will even involve collaborating with NASA.

"I think this kind of global research will continue to grow and there will be a continuing need for education and research that can be offered by Doshisha ... that will directly connect with our continuing desire to nurture talent that can contribute to global society," he said.

"With its history and culture, Kyoto is already a huge pull for people from countries worldwide. My hope is that Doshisha, with its globalized outlook and desire to foster talented people who act according to their own judgement and conscience that was instilled from the university's very inception, will become a central part of that."

Doshisha University

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One of the major aspects of the university's educational philosophy is internationalism. DOSHISHA UNIVERSITY

Space biomedical technology utilized in university project for a healthy life

Inside the biomedical engineering labs at NASA, scientists are charged with developing advanced life-support machines to help astronauts breathe for longer in space.

Others have developed custom equipment — space gyms, in a sense — enabling astronauts to complete full-body workouts on the International Space Station; exercise helps counteract the perpetual problem of microgravity causing accelerated bone and muscle loss among astronauts.

Meanwhile, inside Doshisha University's labs in Kyoto, a unique project aims to incorporate research surrounding ways to utilize the adverse conditions encountered by astronauts in space toward helping mitigate health issues on Earth.

The Doshisha Space-DREAM (Doshisha Research Project for Active Life in Space Engineering and Medical Biology) Project was launched in April last year, calling upon individuals from around the world. Its goal involves bringing together a broad spectrum of academic fields connected to human health to use space bioengineering as a base for interdisciplinary research.

Notably, it will look into a prominent societal issue faced by Japan and many other advanced nations — how to prolong a healthy life in aging societies.

Japan is presently one of the world's oldest countries demographically, with the number of people over 65 totaling around 34 million (26.6 percent of its population

of roughly 127 million) in 2015, according to the National Institute of Population and Social Security Research. The institute estimates the percentage will increase to 35.3 percent by 2040 and 38.1 percent by 2060, assuming the median estimate of fertility ratio will be 1.44 in the long term.

Meanwhile, according to the World Health Organization, Japan's average life expectancy was 81.1 years for men and 87.1 years for women last year.

Doshisha's Space-DREAM project is designed on the premise that healthy life can be extended by exploring ways to improve, or even prevent, various conditions that commonly affect the elderly, such as Locomotive Syndrome, a condition of reduced mobility due to impairment of the musculoskeletal system.

In super-aging societies such as Japan's, it's widely believed that many people are likely to experience Locomotive Syndrome, which in addition to mobility disorders such as osteoporosis is caused by diabetes-inducing Metabolic Syndrome and high blood pressure.

Exercise has been shown to be an effective intervention for improving motor function, but has obvious limitations with elderly people, especially those who experience degenerative diseases of the musculoskeletal system.

Doshisha's Space DREAM project focuses its research on body functions in outer

space, which would seem counterintuitive considering the types of symptoms affecting the elderly are well known to be compounded by microgravity.

However, according to project leader Nobutaka Tsujiuchi, who is a professor at Doshisha's Department of Mechanical and Systems Engineering, such observations can prove useful when applying space biomedical technology, which takes into account how body functions acclimate to outer space and seeks out ways to mitigate or prevent that acclimation.

"This led to the establishment of a plan that could tackle the issue of extending healthy life expectancies for the average citizen on Earth," said Tsujiuchi, whose extensive body of research includes exploring movement under microgravity, simulated using an anti-gravity treadmill.

Doshisha researchers who are involved in the Space-DREAM project will also collaborate with scientists around the globe, including those at NASA's Johnson Space Center, the European Space Agency and the Italian Space Agency.

The program has already attracted attention from several quarters, including the Japanese government.

Last year, Doshisha University was selected by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) for its "private universities research branding project." This project is designed



An experiment using the Active Response Gravity Offload System is conducted at the Johnson Space Center, NASA. DOSHISHA UNIVERSITY

to encourage university presidents to instigate research that exemplifies the unique characteristics of each institution.

With its global and progressive outlook, not to mention its unwavering respect for freedom of research — especially that which stands to benefit wider society — university President Takashi Matsuoka believes the Space-DREAM project was well-matched to Doshisha's founding tenets and future goals.

Interestingly, the Space-DREAM project was already underway at the time of selection, but was hailed by MEXT as an example of research with "huge potential" for success, not to mention "further enhancement" of the university's branding strategy.

Acknowledging that the chances of such

success are improved through maximizing the breadth and scope of those involved, Space-DREAM has been incorporated in the research activities of other leading educational research bases run by Doshisha, including the Institute for Technology, Enterprise and Competitiveness and the Life Risk Research Center, as well as around 40 other research centers, "acting as our research base for solving the most current issues," said Tsujiuchi.

"Universities are increasingly expected to deepen their insights regarding the effects of technological advancements on society and how people and society come to be," he said.

As research platforms and how they're implemented in everyday society evolve, Tsujiuchi believes it is also necessary for

universities to continue maintaining a balance between competition and cooperation. "Our comprehensive university will use the scientific and technological research results of this project to continue striving to solve both humanitarian and scientific problems as they develop in the fields of social welfare and other social sciences," he said.

In addition to contributing toward advancements in space biomedical engineering, Tsujiuchi explained the project also promotes other medical endeavors seeking practical application. Projects include new kinesiotherapy options for astronauts and those who have trouble walking, as well as developments in rehabilitation and pharmaceuticals.

(Sponsored content)

Keio University

Developing creative solutions that benefit the international community

Our global society is grappling with a myriad of challenges — from artificial intelligence and its rapid development to the effects of climate change and aging populations — that require bold, innovative solutions. As these issues grow in urgency and complexity, it is up to universities to foster global citizens who can contribute to the international community by utilizing their expertise for the betterment of all.

Against this backdrop, Keio University has developed interdisciplinary frameworks to foster students capable of negotiating the complexities of global society, as well as hubs that support cutting-edge research in artificial intelligence, life sciences, and other fields. Drawing from its rich history and traditions, together with an ethos of independence, self-respect and promotion of the social good, Keio University is committed to creating a better future by proactively pursuing research and education initiatives that address today's most pressing issues.

Redefining globalization

For Keio University, educating students capable of leaving a positive mark on the world is integral to contributing to global society. University President Akira Haseyama believes that the process of finding ways to accomplish this represents an opportunity to reevaluate the concept of globalization and its legacy.

"When we say 'globalization,' we often refer to the flow of people, resources, goods and capital across territories," Haseyama explained. "The term was initially used to refer to contemporaneous economic patterns, different from those in the 19th and 20th centuries when England and the U.S. exerted dominance across the globe. I believe we are now at a point where we can reconsider what globalization has meant for all countries."

This reevaluation of globalization extends to the role of Japanese universities.

According to Haseyama, globalization presents challenges for Japanese universities because it tasks them with preserving their identity while adapting to global standards. One of these standards is the establishment of English — the academic world's lingua franca — as a universal language across institutions.

"Establishing English as a universal language presents unique and considerable challenges in Japan, where the principle language of education from the elementary level through to university remains Japanese," said Haseyama. "Just as Latin was the common language among academics in the Middle Ages, so now is English the sole universal language among academics today."

"Japanese is nevertheless an incredibly versatile language," he continued. "Logographic characters and phonetic lettering systems have enabled a wide array of advanced materials across all fields to be precisely translated into Japanese, resulting in a rich accumulation of knowledge. But in order to meet the demands of our times, we need to be ardent about outputting our research in English so that it is accessible to the international community. While Japanese researchers in the natural sciences have grown accustomed to publishing and presenting their work in English, it is very important for us to encourage researchers in law, the humanities, and the social sciences to do the same."

Diverse research

Keio University's research is characterized by its unique, interdisciplinary qualities. The university's activities in haptic robotics are an example of such research. Haptics refers to technology that uses vibration, motion and the application of force to make robots capable of delicate touch; in the field of medicine, this technology can be used to conduct remote medical procedures. Keio University has the School of Medicine as well as the Faculty of Pharmacy and Faculty

of Nursing and Medical Care — a rare combination among private universities in Japan — making it a key environment for medical specialists and engineers to collaborate on innovative interdisciplinary research.

Demonstrating Keio University's role as an international hub for interdisciplinary research is its designation as the base of the Association of Pacific Rim Universities (APRU) Population Aging Program. Keio University is an ideal location for this program, given that Japan is home to one of the world's most rapidly aging societies. It's Center for Supercentenarian Medical Research and Research Center for Financial Gerontology both use medicine, economics, and engineering to address the challenges posed by an aging society.

AI for social good

According to Haseyama, an important aspect of interdisciplinary research is the role of the humanities, social sciences, and law in establishing an ethical framework from which to assess how technology is applied. Developments in robotics and AI open up new possibilities to improve people's quality of life, but such groundbreaking technology will also likely affect social, economic and diplomatic relations. Haseyama asserted that scholars across diverse fields must work together to ensure that these technologies are ethically implemented. They must also formulate appropriate regulations to prevent any negative social effects these technologies may bring.

Keio University has therefore established itself as a hub for discussions centering on AI's social and ethical implications. In 2018, the university led an international collaborative project between Google and APRU titled "AI for Everyone: Benefitting from and Building Trust in the Technology," which brought together experts from member universities in Russia, Australia, China, Hong Kong, Japan, Singapore, Mexico and Chile to discuss an array of issues including AI devel-

opment, ethics, and governance.

"It is common belief that AI, robotics, and the 'internet of things' will improve our lives. However, there are also specific concerns about the development of AI, in particular that it will usurp human labor," Haseyama said. "I believe it is the role of universities to address and explore these concerns. Industry will naturally focus their resources on research and development. However, if this development leads to adverse consequences for society, it will be the responsibility of the government to implement necessary regulations. Universities act as an intermediary in the triumvirate formed with industry and government," he continued. "Among their responsibilities is determining how to regulate certain technologies based on safety and social considerations and proposing guidelines to government bodies. That being said, universities should not act as a third party between industry and government, but should work alongside them from the start to find the best solutions," he observed.

These discussions will continue to evolve in "AI for Social Good," a collaborative project established by APRU in 2019 in partnership with Keio and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), and comprised of researchers from Japan, Australia, Singapore, India, Thailand, Korea, and Hong Kong. Keio Vice-President Jiro Kokuryo moderated at the project's kick-off meeting on June 5 and is coordinating on academic fronts. This project will not only feature the findings of individual researchers, but will also represent APRU in presenting policy recommendations to ESCAP.

On the world stage

Next year, Japan will host an event that will see people from around the world converge on its soil — the 2020 Summer Olympics and Paralympics. In the run up to this event, Keio University will host the preparation



Keio University President Akira Haseyama SATOKO KAWASAKI

campus of the British Olympic and Paralympic teams. Keio's involvement with the British teams will promote international exchange between university students and visitors from overseas, as well as encouraging enrollment among prospective international students. The chief medical officer of these teams will visit in August and chair a seminar for specialists in the School of Medicine, paving the way for potential partnerships to address safety, congestion and other pressing issues for the upcoming games.

The Tokyo 2020 Paralympics will showcase the potential of disability innovation to impact the lives of disabled people globally. Alongside the games, Keio University, the Global Disability Innovation Hub and the British Council will co-host a ground-breaking international summit to explore the latest technologies, research and thinking in this rapidly expanding field.

Further exciting events as part of the Graduate School of Media Design's (KMD) Superhuman Sports Project headed by associate professor Kouta Minamizawa set to take place in the next year also tie-in with the Global Disability Innovation Hub's activities. This is a project to create new and inclusive sports using augmentation and technology to transcend competitor's physical and cognitive abilities as well as age groups.

Keio, along with 10 other universities from eight countries, is a founding member of the University eSports International Initiative, the name that APRU currently uses to refer to the APRU eSports project. However this project may change shape after a meeting of all founding members set to take

place at UCLA in June. E-Sports refers to competitive video games, and while recent attentions have focused on their potential to generate both profitability and adverse health effects, there remains a dearth of academic research on the subject. E-Sports has established a strong presence in modern society and thus invites consideration from economic, legal, and ethical perspectives. While it remains to be seen what the future holds for this field of research, Keio University will surely be on the front lines in addressing the contingent issues that global society will face.

Whether it is establishing an ethical framework for AI development, addressing the challenges of an aging society or using sports to break down the barriers that divide us, what underpins Keio University's wide breadth of international collaboration is its drive to find innovative solutions to dilemmas and ways to reconcile invested parties. "As cultures and countries interact with one another, conflicts will inevitably arise," said Haseyama, concluding by invoking Keio University founder Yukichi Fukuzawa's emphasis on dialogue to find creative, peaceful society, and the importance of leveraging Keio's unique know-how.

Keio University

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Keio University will host the preparation camps of the British Olympic and Paralympic teams. KEIO UNIVERSITY

Supporting aging populations, agriculture

Keio University is the host of several flagship research initiatives engaged in developing solutions to some of the biggest challenges facing the international community.

Last year the Association of Pacific Rim

Universities (APRU) relocated its Population Aging Research Hub to Keio University. With its Center for Supercentenarian Medical Research and the Research Center for Financial Gerontology, Keio University has abundant data available for research-

ers from member universities to leverage in order to address the challenges which accompany aging populations.

For instance, the Center for Supercentenarian Medical Research houses data collected from hundreds of centenarians and utilizes cutting-edge research methods, such as multiomics analysis, iPS cell phenotyping and molecular autopsy to develop new treatments and intervention strategies. Meanwhile, the Research Center for Financial Gerontology draws from economics, medical science, psychology, social science, public health, and public policy to devise interdisciplinary solutions to the socioeconomic challenges of aging populations.

Some recent topics at high-level policy discussions include improving research funding mechanisms at national and international levels to spur innovation in the field of healthy longevity; the importance of preventative health care and education in reducing the social and financial cost of aging populations; and the development of effective indicators to assess healthy lifespans.

Working toward transforming the world into a sustainable global society, Keio University is using the U.N.'s Sustainable Development Goals (SDGs) to conduct transdisciplinary research that will address the world's most complex environmental issues. This research is being conducted at the university's xSDG Laboratory.

A distinct characteristic of the xSDG Laboratory is its partnerships with private corporations and local governments. In the Times Higher Education (THE) University Impact Rankings 2019, Keio University was ranked 91st in the world. These rankings measure the social and economic impacts of universities, particularly in relation to the SDGs set by the United Nations.

While its overall ranking is 91, Keio University ranked 37th in both Goal 17 — "Partnerships for the Goals" — and Goal 9 — "Industry, Innovation and Infrastructure" — reflecting the university's strong partnerships with the public and private sectors.

In the field of agriculture, Keio University is engaged in research and development of an AI-powered management system to improve cultivation, production and distri-



The Superhuman Sports Project at KMD aims to remove barriers caused by age and physical and cognitive abilities. KEIO UNIVERSITY

bution of agricultural products in Shizuoka Prefecture. In Japan, farmland accounts for around 12 percent of total land area, whereas forests account for 67 percent. The creation of farmland generally necessitates the clearing of forests, which is in direct

conflict with conservation efforts and climate change countermeasures. Japan therefore aims to increase agricultural production within small areas of farmland while simultaneously recycling resources and utilizing timber.



A discussion during "AI for Everyone," the forerunner of "AI for Social Good" KEIO UNIVERSITY

Ritsumeikan University

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Educational endeavors for promoting global diversity

As the international community faces multitudes of environmental, economic and social challenges, universities are tasked with cultivating global citizens equipped with the knowledge and sensibilities required to develop effective solutions. To this end, Ritsumeikan University is building upon its firm foundation in global education, providing students with a learning environment where they can unlock their potential and connect with the world.

A major theme of the educational initiatives pursued by Ritsumeikan University is the ever-changing nature of knowledge. “Our current times call on us to examine how knowledge itself—for instance, how it is acquired and used to express ourselves—is changing,” said Ritsumeikan University President Yoshio Nakatani. “The future is uncertain, and therefore our global society needs individuals who can discover meaning and use it to formulate solutions that can be applied to society.”

Of crucial importance to the university is enabling students to develop a global sensibility, an awareness that what they experience in their everyday lives is part of a larger global context. Meaningful, real-life experiences are the building blocks of this sensibility, Nakatani observed. “Whether in the digital or physical world, it is vital that students experience a wide spectrum of emotions such as joy, sadness and confusion, in order to develop empathy and an

awareness of the varied value systems and ways of thinking that exist in our world.”

Diversity focus

Nakatani added that diversity plays an important role in cultivating this global-oriented empathy, which is why Ritsumeikan University has consistently focused its efforts on welcoming international students from around the world and creating abundant opportunities for Japanese students to study abroad. It is with this very much in mind that the university established a brand new college, the College of Global Liberal Arts (GLA) in April this year, in addition to the establishment of its new Joint Degree Program in its College of International Relations in April 2018. Both represent an increasing move toward deep and lasting collaboration with top global universities—the former with The Australian National University, the latter with American University.

These efforts are part of the university’s vision to spur globalization in the everyday lives of students. “It is essential that we interpret the happenings in our everyday lives as ones that connect us to the rest of the world. This awareness will lead us to solutions, which will in turn lead to true globalization for the betterment of all,” Nakatani noted.

This vision of the university, of incorporating globalization in the lives of students,



The Marble ground delivery robot follows a person at Biwako-Kusatsu Campus
RITSUMEIKAN UNIVERSITY

is reflected in various initiatives across each and every campus. One example is Sustainable Week, a yearly event where student associations come together to develop and present plans that address specific U.N. Sustainable Development Goals. These

presentations span a wide array of topics, from addressing gender inequality through athletics to spreading awareness of areas affected by water shortages, and they have attracted thousands of visitors every year since the event’s first iteration in 2017.

Nakatani emphasized the facilitating role of the university in such events by saying, “We support students—for instance, by providing consultation when necessary—so that they can develop their own solutions.” One presentation at Sustainable Week that left a lasting impression on Nakatani centered on the goal of providing quality education to children. To this end, one student association provided a platform for elementary and junior high school children to express their thoughts, in English, on the importance of sustainability. Along the way, university students assisted these children with their English, thus support-



Ritsumeikan University President Yoshio Nakatani
TAKEO KONISHI

ing the educational development of children in their community and igniting an important spark within these adolescents to think about sustainability and express themselves.

It is these kinds of sparks of inspiration, as seen in the Sustainable Week presentations, that lie at the center of Ritsumeikan University’s initiative to highlight the interesting activities taking place within the university.

An example of activities is the test introduction of service robots at the Biwako-Kusatsu Campus. In collaboration with Mitsubishi Estate Co. Ltd., these three robots—an autonomous ground delivery robot, an automated floor-cleaning robot, and a follow-up type automated delivery robot that can haul up to 300 kilograms—have been introduced into the campus not only because of their functionality, but also to show students how cutting-edge technologies can be used to create new value.

“It is important that we excite students by visibly showing them the various activities and research that students and faculty are engaged in,” Nakatani said. “In our current times, we as a university need to be more than just a place where educators impart knowledge to students; we need to be a place that empowers students and creates the impetus for them to cultivate sensibilities so that they can develop their own solutions and even surpass their professors.”

Ritsumeikan University

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Sustainable Week is a yearly event where dozens of student associations come together to develop and present plans that address specific Sustainable Development Goals. RITSUMEIKAN UNIVERSITY



Diversity plays an important role in globalization. RITSUMEIKAN UNIVERSITY

Programs help students tackle challenges

Ever since establishing its College of International Relations in 1988, Ritsumeikan University has distinguished itself as a leader of global education in Japan, with world-class education and research initiatives across 16 undergraduate schools and 22 graduate schools in campuses in Kyoto, Shiga and Osaka.

Continuing its legacy as a leader of global education, April 2018 saw the establishment of a groundbreaking new degree program at the university, offered by the College of International Relations in col-

laboration with American University’s School of International Service. The Joint Degree Program will see students enrolled at both universities, and will lead to a Bachelor of Arts degree in Global International Relations. With a curriculum specifically designed for students to learn about Western and non-Western approaches to international studies, Ritsumeikan University will work together with American University to cultivate globally minded leaders who are ready and prepared to take up active roles in international fields.

This year, the university has continued to challenge itself to innovate with the establishment in April of its College of Global Liberal Arts (GLA). Featuring a dual degree program with the Australian National University (ANU), Australia’s top university—ranked 29th in the world according to the QS World University Rankings 2020, GLA is the first of its kind in Japan to offer a curriculum where collegewide contents are specifically designed around the program.

Envisaged to welcome around 70 international students and 30 Japanese students per year, with all courses conducted in English, GLA will create a diverse environment in which students from around the world can thrive as they share their perspectives and learn from each other. The partnership with ANU is the result of Ritsumeikan University’s commitment to creating a global learning environment where students can expand their horizons and examine topics from a renewed perspective centered in the Asia-Pacific region.

Situated in Osaka—a cultural, historical and commercial center of Japan—GLA provides a unique learning environment on and off campus. The rich culture and history of Osaka, as well as nearby Kyoto and Nara, are the perfect settings to explore topics introduced in GLA’s curriculum. These settings in Japan, as well as ANU’s rich educational environment in the multicultural landscape of Australia, give students access to a unique set of resources that they can utilize on their path to becoming global citizens equipped to take on the challenges of the times.

Central to GLA is the concept of a shared curriculum, developed collaboratively by Ritsumeikan University and ANU, that will see all students have access to the same courses irrespective of whether they enroll initially at Ritsumeikan University or ANU; leading ultimately, upon successful completion, to the award of a bachelor’s degree in Global Liberal Arts at Ritsumeikan University, in addition to a bachelor’s degree in Asia-Pacific Affairs from ANU.

Students who enroll at Ritsumeikan University will not only spend a year taking ANU courses in Australia, but will also take ANU courses taught by ANU faculty for a full two years of their study at Ritsumeikan University’s Osaka Ibaraki Campus. This will be led and monitored by ANU course convener Christopher Hobson, who will be based in Japan.

The curriculum will be centered on three pillars: cosmopolitan studies, civilization studies, and innovation studies, under the guidance of expert faculty from around the world. It also features courses in Japanese studies, in which students will learn about Japanese history, culture and society, as well as comprehensive Japanese language courses to help international students transition into Japanese society.

At ANU students will have access to the abundant education and research resources of Australia’s top university while experiencing the country’s multicultural environment. In Japan, students will be based in the Kansai region—a cultural and historical hub of Japan—where, on and off campus, they can explore topics introduced in



Osaka Ibaraki Campus RITSUMEIKAN UNIVERSITY

GLA’s curriculum. Ritsumeikan University’s “gateway to Asia,” Osaka Ibaraki Campus is an ultra-modern campus that blends seamlessly with the city, with high-quality amenities and a new on-campus international dormitory slated to open in September.

GLA offers a wide array of internship opportunities for students to acquire practical experience and skills in finance, manufacturing, as well as other traditional industries in Japan. Featuring partnerships with corporations that conduct business in English and Japanese, these opportunities are perfect for students who want to develop their Japanese language proficiency in business contexts.

The college’s goal is to empower students to find solutions to challenges facing the international community. By studying at

two of the top educational environments in the Asia-Pacific region, students will cultivate global sensibilities that will enable them to reconsider and develop their perceptions of the region. Similarly, by providing a bridge between continents, the Joint Degree Program between Ritsumeikan University and American University will seek to provide the leaders of tomorrow with the skills and awareness required to step out onto the international stage.

In our current global society that faces a myriad of challenges—environmental, social and economic—this kind of global citizen is indispensable. Ritsumeikan University has taken on the mantle of leadership in global education and is nurturing world-class leaders capable of addressing the world’s most pressing issues.



College of Global Liberal Arts features a dual degree program with the Australian National University, where students have access to its abundant research resources. RITSUMEIKAN UNIVERSITY

Soka University

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A citadel of humanistic education fostering global citizens

Within the verdant grounds of the Soka University Campus, there are two unmissable bronze statues.

Beneath one, a plaque asks: "For what purpose should one cultivate wisdom? May you always ask yourselves this question," while the other reads, "Only labor and devotion to one's mission in life gives life its worth."

Since its founding in western Tokyo's Hachioji in 1971, Soka University has sought to instill among its students not just a sense of studiousness and industriousness, but also asks them to continually ponder ways in which those two qualities can be applied for the betterment of humankind.

Founding philosophy

"The university was founded on three principles — Be the highest seat of learning for humanistic education; Be the cradle of a new culture; and Be a fortress for the peace of humankind," said Yoshihisa Baba, president of Soka University and a professor of econometrics. He added that these principles remain at the heart of the university's philosophy, even as it continues to evolve.

To elaborate, the first of the three principles defines the university's humanistic approach to education. University education should not be limited to the teaching and acquisition of specialized knowledge. Soka University strives to provide humanistic education that will foster individuals who are able to freely employ knowledge in order to bring forth the wisdom that is rooted in rich humanity, to creatively confront the challenges of humankind.

The second reflects the key role of taking the lead in the new culture, an integrating philosophy that embraces and brings order to the diversity of human susceptibilities, culture, reason and learning. In order to establish a global culture, the university aims to foster individuals with passion, enriched by learning, who creatively take the lead in

each field. With the solidarity of these individuals, Soka University aims to be a cradle for the creation of a global culture based on the solidarity of global citizens — a solidarity of creative humanity.

The final principle upholds the philosophy of peace for all humankind. Without peace, there is no construction of a new culture nor the development of the future. In what way to protect peace is the greatest challenge of humanity. For the realization of this, university founder Daisaku Ikeda has conducted many dialogues with intellectuals worldwide and opened paths of exchanges between humankind. Soka University inherits this spirit, to develop open dialogue with people around the world and aims to become a fortress to protect the happiness and peace of humankind.

"Ikeda not only advocated these founding principles, but also contributed to society through value-creation, which is the main mission of Soka University and he encouraged students to become creative individuals," said Baba. Ikeda spoke of the importance of "global citizens," who are capable of value-creation on a global scale, during a lecture titled "Thoughts on Education for a Global Citizenship" at Teacher's College, Columbia University in 1996.

He said the following three principles are the essential elements of global citizenship: 1) The wisdom to perceive the interconnectedness of all life and living; 2) The courage not to fear or deny difference, but to respect and strive to understand people of different cultures, and to grow from encounters with them; 3) The compassion to maintain an imaginative empathy that reaches beyond one's immediate surroundings and extends to those suffering in distant places.

Soka University strives to foster "creative global citizens" with wisdom, courage, and compassion, which are rooted in the founding philosophy, through promoting educa-



Fostering global citizens is one of the university's missions. SOKA UNIVERSITY

tion and research in various fields.

Fostering global citizens

In its quest to cultivate global citizens, Soka University now comprises eight undergraduate faculties, five graduate school programs, and two professional graduate school programs. With around 7,700 students enrolled, the university has exchange programs with 214 universities across 61 countries and regions.

Roughly 60 percent of Japanese students at Soka University study overseas and the university hosts around 730 international students annually. The newly opened international dorms, where both Japanese and international students live together, provide a comfortable setting for cross-cultural exchanges.

"The dorms and halls of the university have grown to be an international environment where different languages and ways of seeing the world cross over. ... It's a valuable introduction to what they will face

when they step out into the wider world," Baba said.

Efforts to create a globalized campus for students were recognized when Soka University was selected for Japan's Top Global University Project by the Ministry of Education, Culture, Sport, Science and Technology in 2014.

In this vein, the university continues to excel as a leader in the globalization of Japan's education, receiving the highest evaluation of "S" in its latest mid-term evaluation.

With the theme of "Global Initiative for Humanistic Education — Fostering Global Citizens for Building Peace and Sustainable Prosperity," the university has been fostering creative global citizens that can contribute to the development of society, Baba explained.

One of the notable initiatives is the increase of English Medium Programs (EMPs), which is a general term for courses in which students can earn a degree by only



Soka University President Yoshihisa Baba ROB GILHOOLY

using English, in undergraduate and graduate studies. The university currently offers 11 courses including the Faculty of Business Administration, International Liberal Arts, and Graduate School of Engineering.

The university has also established overseas offices in Beijing, Bangkok, Seoul, and Caloocan in the Philippines, thereby strengthening its connections throughout Asia.

Soka University is also engaged in various international activities including a research project aimed at establishing a sustainable recycling society in Ethiopia.

Owing to these efforts, this year, the university was ranked in 101st to 200th place (overall) in the Times Higher Education University Impact Rankings in the world for its engagements in the United Nation's Sustainable Development Goals (SDGs).

Furthermore, the university was ranked 61st for SDG 16 — Peace, Justice and Strong Institutions.

International careers

On an individual level, students and alumni are also making their mark on the global stage. In the World Robot Challenge 2018 at Tokyo Big Site, Soka University placed second in the Partner Robot Challenge (Virtual Space) category themed around humans and robots working together.

In the realm of sports, students continued a winning streak in the International Cheer Union's 2019 World Cheerleading Championships with their fourth consecutive victory in the category of Hip-hop Doubles.

The G(irls) 20 Global Summit Argentina 2018 also marked the fourth time in a row

that a Soka University student has represented Japan.

These experiences during their student years lead many alumni to thrive in their careers. "Through work, I visit many different countries and without fail there are Soka alumni giving it their best in their careers," Baba said, adding they can be found anywhere all over the world, even in countries such as Uzbekistan, the Czech Republic and Kenya.

Many of them are involved in activities that directly benefit society; one graduate, for example, has worked for the United Nations Human Rights Commission since 1993 and was a director of its offices in Bangladesh when some 650,000 Rohingya refugees arrived there in 2017.

Some international alumni sometimes find themselves returning to Japan as diplomats. Two notable figures are Russian Ambassador H.E. Mikhail Galuzin and former Chinese Ambassador H.E. Cheng Yonghua.

Through its many programs and efforts, Soka University remains steadfast in its commitment to its founding principles and the contribution to the happiness and peace of the people in today's ever-evolving society.

Soka University

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An aerial view of Soka University Campus SOKA UNIVERSITY

Degree courses	
Faculties	Graduate schools
Faculty of Economics	Graduate School of Economics
Faculty of Business Administration	Graduate School of Law
Faculty of Law	Graduate School of Letters
Faculty of Letters	Graduate School of International Peace Studies
Faculty of Education	Graduate School of Engineering
Faculty of Science and Engineering	Professional graduate schools
Faculty of Nursing	Law School
Faculty of International Liberal Arts	Graduate School of Teacher Education

Syrian student hopes to share ideas of peace

Mohamad Ghaith Alzin is not your run-of-the-mill overseas student. The information systems science student chose Soka University for his postgraduate studies partly due to his interest in Japan, but mostly because he could not study in his home country.

Home for Ghaith is Damascus, the war-torn capital of Syria, from which he fled after high school, leaving his parents and three younger siblings behind.

"Before the Syrian war, we were living a beautiful and peaceful life in Damascus," he said. "I never thought that I would live outside Syria for a long time because of the war. The family situation was perfect before then. After the war, the financial and psychological condition of my family deteriorated."

After finishing high school in Syria, Ghaith decided he wanted to continue his education outside his home country.

His dream was to study communication engineering in English, and with one grandmother having already relocated to Lebanon as a direct result of the war, he decided to move there and enrolled at the Lebanese International University (LIU).

After obtaining a bachelor's degree in communication engineering at LIU, he decided to continue on by pursuing a master's, but had to first find a way to finance himself.

"I registered for one semester and worked in the university cafeteria at the same time," he said, adding his 6 a.m. to 5 p.m. work shift made it almost impossible to manage his studies.



Mohamad Ghaith Alzin (far left) before flying to an international conference with his classmates and professor. SOKA UNIVERSITY

Subsequently, he started to search for scholarships, one of which was sponsored by the Japan International Cooperation Agency. Soka University caught his eye, as it offered an area of postgraduate study that was of particular interest — namely, information processing systems science.

"Any new environment is challenging in the beginning, but for me, I was pleased to discover a new culture like the Japanese one," he said. "Japan is well-organized as a country, and Japanese people are very kind. The most challenging part for many Syrians is finding Halal food, but I adapted

to eat delicious Japanese food."

Ghaith says his goal after graduating is to work for a Japanese drone company to gain experience and knowledge as well as utilize his own research at Soka University, but he eventually would like to return to Syria.

"I would like to contribute to the rebuilding of Syria soon," said Ghaith. "To do that, I think I need to grab a lot of skills from studying and working in Japan."

He also intends to carry with him the philosophy of the university founder, Daisaku Ikeda.

"I believe that Ikeda's philosophy makes our world a peaceful place to live by inspiring people to work for peace and humanistic education.

In addition, it does not support war makers or anything leading to war. So, I will try to bring what I learned at this university to Syria someday," he said. His dream for the future is to build a company in Syria that promotes peace through technology, "And if possible, I would like to establish a university that teaches peace with other disciplines — like Soka University," Ghaith stated.

Highly recognized in MEXT's Top Global University Project

In 2014, Soka University was selected for the Top Global University Project initiated by the Ministry of Education, Culture, Sport, Science and Technology (MEXT). Of the 37 universities selected for the project, Soka University is categorized as a Type B or Global Traction Type.

This 10-year project (2014-2023) aims to enhance the international competitiveness of Japanese universities by providing prioritized support to universities that are leading the internationalization of Japan's education through various initiatives related to research, educational systems and worldwide networks.

In the mid-term evaluation of the project released in 2018, Soka University received the highest ranking of "S" in recognition for its progress.

In the report, not only were the future prospects good with expectations that the university will achieve the project goals by 2023, but the report also outlined many of the targets that had been achieved.

Soka University holds a theme of "Global Initiative for Humanistic Education — Fostering Global Citizens for Building Peace and Sustainable Prosperity," implementing universitywide initiatives to achieve its stated goals based on the four pillars structured around diversity: global mobility, global learning, global administration and global core.

With global mobility being initiatives to accelerate the globalization of the cam-

pus through the enhancement of study abroad programs and the acceptance of students from abroad, the percentage of international students on campus increased from 3.8 percent of the student body in 2013 to 11.2 percent in 2018.

The number of Japanese students studying abroad has also nearly doubled over the same period through the strengthening of university support for both inbound and outbound students accordingly to the growth.

Initiatives for global learning aim to foster creative global citizens through undergraduate and graduate programs that meet the global standards, represented by the English Medium Programs.

One of the outcomes of the global core initiatives is apparent in the establishment of the Global Citizenship Education Course Group that provides students with an exposure to various global issues under the themes of peace, development, environment and human rights.

Students can also pursue further studies in Soka University graduate schools such as the Graduate School of International Peace Studies, with English being its medium of instruction.

"Aiming toward 2023, the final year of this project, we will continue to create a campus filled with diversity and foster creative global citizens who will lead the local community, society and the world in building peace and sustainable prosperity," said Soka President Yoshihisa Baba.

Sophia University

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Pursuing sustainability and diversity in global activities

Since its establishment over a century ago in 1913 as a Jesuit school, Sophia University has steadfastly embodied its mission: “Men and Women, For Others, With Others.” “I think the meaning of nurturing and bringing up young people that can contribute to the global society while retaining our mission has become much clearer today than in the past,” said university President Yoshiaki Terumichi on the current conditions of the school, its students and graduates.

Although Sophia has long been known for its notable globalization activities, “what is important in our academic activities as of today is for each student to become a leader in the global arena while being socially ethical. They also should have solid judgment standards on what is good or bad,” he said.

From a global perspective, overall society is not individualistic, but complex and intertwined. “Our goal is thus to prepare and provide a diverse learning environment that nurtures personnel diversity. Such a stance allows our graduates to work in various international organizations such as the U.N., as well as NGOs and so on,” said Terumichi.

Sophia’s Center for Global Education and Discovery plays a vital role in providing numerous dynamic overseas learning opportunities that contribute to helping each student develop a truly global perspective.

“What I must stress here is that it isn’t enough for each student to just visit and go from one country to another,” said Terumichi. The important point is to provide an external experience for each person that makes them think deeply and broaden their perspective. That is why each program of the center is carefully planned and designed by the respective staff and professors, he added.

“Put another way, every program is a proud handmade outcome of all those involved, and the fruit of many hours of hard work. Of further mention is that upon each occasion, students from the first to the fourth year pursuing different majors are selected as participants,” he said. “In that way, academic diversity is maintained, leading to dynamic, multifaceted discussions ranging from societal, legal, economic and other aspects on many issues such as poverty in an African country.”

Over the years, the center’s programs have been received extremely well, and the first reaction from program participants

has often been gratitude. “They thank us for providing a meaningful learning opportunity that opened their eyes to another world. I have seen many young people change right on the spot when provided the proper stimulus like this program,” he said. As such, Terumichi has heard some first-year students participating in the program even speak of their ambitions to start their own businesses in poverty-stricken areas to make their own contributions.

Beyond the classroom

Terumichi points out, however, that catering to the globalization needs of current Sophia students is not enough. “That is the reason why whenever I have the chance to visit a high school to give a talk, I go down to the floor to have discussions and listen to the true voices and thoughts of the students. I also exchange views with the teachers and staff to obtain first-hand information on what is happening and what they expect in the education environment on a higher level, including our school,” he said.

The results of such hearings have been reflected upon establishing the Sophia Program for Sustainable Futures (SPSF), a new degree program aiming to raise the awareness standard of the youth toward local and global sustainability. SPSF will start accepting students from the autumn semester of 2020, and all lectures will be conducted in English.

“This is because English is vital for communicating in the global community. Moreover, in an era where all areas of society are correlated and respond to each other, we must be sensitive toward everything that surrounds us. That is the reason why at SPSF, six courses will be offered, including economics, sociology, education and media,” he said. “Put another way, SPSF is a place that offers a crossover approach covering many fields, while positioning sustainability and global issues at the core. We also hope to ensure academic diversity there by attracting various students from many other countries outside Japan.”

Sophia also holds a unique stance in providing its students with opportunities to study abroad. Carefully monitoring the effectiveness of each exchange program and taking full advantage of the Jesuit network that spans the entire globe, the university currently has exchange programs with 300 colleges and universities around the world.

Terumichi explained that students in any major can learn technical skills on campus, but that doesn’t necessarily correlate to an international mindset. Through the Social Engagement Program (SEP), students are able to earn credits while studying abroad in areas beyond their comfort zone; locations such as Micronesia, northern Thailand, Africa and Estonia were selected to foster open-mindedness among students by giving them a chance to experience cultures and lifestyles completely different from their own.

“For example, by finding people speaking a completely different language or those who are deprived the luxury of having a hot shower, the students may come to realize the true size and diversity of the world they belong to today,” he said. “They also may become aware of how different values exist outside Tokyo and Japan.”

These perspectives may broaden even further by visiting the Japan International Cooperation Agency’s official development assistance sites, engaging in discussions with local students and participating in homestays.

“The concept of happiness may be different in the up-and-coming nations, and the rules of the advanced nations may not always apply,” Terumichi said. “That is how SEP provides an environment for the students to think and learn what globalization really means. How they use the provided opportunity is up to them, of course.”

However, he did add that he would like the programs to encourage a symbiotic relationship between students and the places they travel to. “Our genuine hope is that each SEP participant will come to scrutinize what can be done to ensure the genuine happiness of the local people they meet in the program,” said Terumichi.

Close UN ties

Another globally focused opportunity Sophia takes part in involves its close relationship with the U.N. As a participating university in the United Nations Academic Impact program, Sophia has held a regular event called “United Nations Weeks” since 2014. This year’s event runs from June 3 to 20 and will spotlight the U.N.’s Sustainable Development Goals.

Highlights include various lectures, symposiums, discussions and career sessions on issues covering gender, crime, international collaboration, poverty, conflict and war, among others.

“I think the U.N. Weeks has already



Sophia University's Yotsuya campus in Tokyo's Chiyoda Ward SOPHIA UNIVERSITY

become a well-established event that attracts a large audience, including high school students and the general public, in addition to those at Sophia. It provides us the opportunity to think together about the world and our future in relation to the activities of the U.N.,” Terumichi said. “Furthermore, to further nurture the global perspective of our students, we have come to establish a close relationship with numerous organizations of the U.N., including the WFP (World Food Programme) and FAO (Food and Agriculture Organization).”

In addition to U.N. Weeks, Sophia holds various seminars and lectures featuring prominent international figures on a regular basis. U.N. Secretary-General Antonio Guterres, former ambassadors to Japan, China’s Cheng Yonghua and the U.S.’s Caroline Kennedy are just a few noteworthy figures who have visited Sophia.

“Thanks also to requests from the Ministry of Foreign Affairs, we continue to receive distinguished visitors from overseas countries and institutions to hold meaningful dialogues and exchanges, almost every month,” said Terumichi.

A global network

As an academic institution at the forefront of globalization, Sophia is also striving to build a network with other schools around the world. “In an era of extreme change, we must have both a macroscopic bird’s-



Sophia University President Yoshiaki Terumichi YOSHIAKI MIURA

eye view, as well as a microscopic aspect that focuses on the details of various issues that surround us. In that context, international collaboration requires both depth and width, and we must have a clear mind to deeply scrutinize each issue. Bearing this in mind, Sophia’s staff, me included, visit many schools outside Japan to build understanding and trustworthy relationships. Such efforts have contributed to raise the recognition standard and presence of Sophia in the global academic arena,” Terumichi said.

On an international level, Sophia has established its name, understanding and trust among overseas countries such as Cameroon and Cote d’Ivoire, as well as regions including Central and South America, as a result of the many years of global activities pursued by its students, graduates, professors and staff.

As for the future, “I look forward to furthering the reputation of Sophia in Japan, as well as in many other foreign countries as a fine institution with a global mindset. In fact, such thinking synchronizes with the activities of (former president) Yoshiaki

Ishizawa. Ishizawa worked to educate and assist the people of Cambodia to restore Angkor Wat. He did not approve of a quick fix by foreign nations or external institutions. Instead, he argued that no matter how long it might take, such a valuable historic asset should be restored and preserved by the hands of the local people themselves so that they could take pride in their work and pass it down to generations to come.

“Ishizawa’s action was taken around the 1980s when Cambodia was still struggling to stand on its own feet after many years of Pol Pot’s dictatorship and internal strife. The country was in dire poverty. But despite such conditions, Sophia welcomed Cambodian students to study and acquire degrees at our school. Eventually, those students rose to high positions in local governments after returning home. They appreciated the many years of help and support from Sophia. Today, we continue the Angkor Wat restoration by retaining Ishizawa’s mind, spirit and stance. This is how Sophia came to be a well-known institution in Cambodia, winning much trust and respect of the local people,” Terumichi said.

Though the ideal and procedure of the above project is time-consuming and little recognized, Terumichi considers such ideas of building human resources, not only in Japan, but also in other countries, indispensable. “I think such an approach is the key to making Sophia more global in a true sense. After all, by doing so, we can continue embodying and remaining true to our mission since our establishment over a century ago: Men and Women, For Others, With Others,” he said.

Sophia University

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Sophia students during study tours in Africa (far left) and Laos (left) SOPHIA UNIVERSITY



The Language Learning Commons is a space where students of different language and cultural backgrounds can gather. SOPHIA UNIVERSITY



U.N. Secretary-General Antonio Guterres delivers a speech at Sophia University. SOPHIA UNIVERSITY



Toyo University

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Cultivating a setting, opportunities for future leaders

In today's increasingly unpredictable world, where borders seem transparent and change happens at lightning speed, Toyo University President Makio Takemura has a resolute vision.

Now, more than ever, the university needs to be an environment that fosters future leaders who can adapt to and tackle issues on a global scale.

The university seeks to absorb the positive aspects of globalization, such as exposure to different cultures and values, and through its students, apply any consequent learning to domestic and international private and public sectors. To do this, the university has been ramping up its English-language efforts.

"When thinking about such globalization, communication in English is vital. This is the reason why we established an English conversation school on our campus," Takemura said.

Educational philosophy

The open-mindedness of the college's approach and views on language learning hark back to that of its founder, philosopher Enryo Inoue, who established the private Philosophy Academy (forerunner of Toyo University) in 1887. Inoue believed in the importance of learning and developing an independent outlook on the world without prejudice or being affected by groundless beliefs. He also believed that students would benefit from learning English or Chinese to fully engage with the world.

"A university is not only a place of sophisticated learning, but also a venue for nurtur-

ing humanity. As conscientious individuals acquiring knowledge, students must act on their own initiative for society to recognize them," Takemura said.

He also emphasized the need for students to understand Japanese traditions and thinking so as to best communicate this with other people who have grown up in different cultures.

Takemura continued: "This is why we reviewed the school curriculum; we now offer numerous social science and humanity courses that teach the culture, history and philosophy of Japan."

In 2014, the Ministry of Education, Culture, Sports and Science (MEXT) selected Toyo University as one of the top 37 universities in Japan that are actively promoting globalization. Following such recognition of Toyo's efforts to open Japan up to the rest of the world, Toyo established three new faculties as strongholds in global learning. Namely, the Faculty of Information Networking for Innovation and Design, the Faculty of Global and Regional Studies, and the Faculty of International Tourism Management.

Toyo as an Asian hub

Toyo is concurrently promoting many other projects that nurture global talent and diversity of both its Japanese and international students. One such example is the Toyo Global Leader Program. Seeking to turn Toyo into an Asian hub where global leaders come together for their research and study activities, students across different faculties are able to apply to participate in the program.



A "Diversity Voyage" activity in Bhutan designed to expand students' global outlook GIFT

Program participants are expected to develop skills in the following three areas — expressing themselves well in a different cultural environment, creating innovative cultural values and improving their ability to solve problems in different cultural settings. Students receive a gold, silver or bronze ranking according to various criteria, such as attending overseas trainings, activities and internships, or acquiring high TOEIC (Test of English for International Communication) scores.

Another global undertaking is Toyo's "Diversity Voyage," a twice-a-year short-term overseas training program held in col-

laboration with GiFT (Global Incubation x Fostering Talent), a general incorporated association aiming to nurture participants' "global citizenship" capabilities.

In this 11-day program, an annual total of 240 students become "Diversity Voyagers" who visit Malaysia, the Philippines, Laos, Indonesia, Bhutan and Cambodia. Through active exchange and dialogue, the students investigate and offer solutions to specific problems faced by each locality. For example, they may encourage young people in the Philippines to become self-sufficient through teaching English, their second native tongue, or propose action plans for midwives and social entrepreneurs in rural Indonesia after discussion with the midwives.

"Regardless of whatever era or environment, we must bring up our own future leaders who can tackle issues with a dynamic perspective," said Takemura.

Also important was that education was accessible to all generations — including those already working — so that Toyo University could fulfill its mandate of becoming a driving force for globalization activities in the Asian region.

The school's efforts have garnered praise among various elementary, junior high and high schools in Japan. The university now plans to provide global education opportunities to those who are much younger or older than university students by employing non-Japanese teachers who hold lectures in English.

"As part of that process, we must know which direction we are taking to instigate societal change, without isolating ourselves from our surroundings or just blindly following the industrial sector," Takemura said.

Aid for foreign students

With issues like disparity and unequal education opportunities occurring on a global scale, Takemura shared an additional need for Toyo University to tackle problems and achieve sustainable development goals through joint research and development with overseas organizations.



Toyo University President Makio Takemura SATOKO KAWASAKI

"At a time and in the era of artificial intelligence and the 'internet of things,' when Japan's population is rapidly aging and the birthrate is dwindling, we must rethink the existence of mankind itself," he said, adding that such philosophical thinking is important under many different circumstances. In the educational sector, the need to provide equal opportunities in global learning to both Japanese and international students alike, regardless of age or sex, is key.

One of the university's attempts to do this is through the Toyo Top Global Scholarship A, a program providing full scholarships to its overseas students during their entire four-year schooling at Toyo. The scholarship includes tuition waiver, as well as a housing allowance and living expense coverage of ¥150,000 per month. Upon passing the Toyo Scholarship Examination, a total of 60 top international students from around the world receive this scholarship each year to study, exchange views with Japanese students, and enjoy their campus life at Toyo.

Intensive career support programs have been designed to assist the job-seeking and career-building activities of Toyo's international students as more and more overseas students are choosing to stay in Japan to live and work after graduation. Business Japanese programs, job-hunting seminars, workshops on CV writing in Japanese, as well as the

provision of tips on interviews and business manners unique to Japan are just some examples of support offered.

On a broader scale, Toyo serves as the international secretariat host university for UMAP (University Mobility in Asia and the Pacific), a voluntary organization comprised of government and non-government representatives of the higher education sector. As of March 2019, UMAP had a membership total of 111 universities spanning 36 eligible countries and regions around the globe. Member nations span Asia, North America, South America and Oceania, among other areas.

Serving as the international secretariat host until 2020, Toyo supports UMAP's activities and encourages mobility among university students and staff. This includes the assistance in cooperation and exchange, planning and execution of seminars, workshops and lectures, as well as the dissemination of information on related resources.

Toyo University

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A "Diversity Voyage" activity in the Philippines GIFT

'Campus of the future' homes in on curriculum for the digital age

As a so-called campus of the future, Toyo University's Faculty of Information Networking for Innovation and Design (INIAD) in Akabane-dai, metropolitan Tokyo, offers students the value of networking through specialized course streams, which consist of science and engineering, digital design, business innovation and social infrastructure to best navigate today's information society.

INIAD's most radical feature, however, is its HUB-1 school building that strives to be completely paperless to best demonstrate the power of information technology and networking. Approximately 5,000 "internet of things" devices are installed in the 19,000-square-meter building, where PCs and projectors are utilized by both teachers and students to join the internet and various intranetworks.

This "concept of optimizing the control of equipment and devices according to how spaces are being used" is a goal of Faculty Dean Ken Sakamura's research. At INIAD, school notices and information are communicated via digital signages that are changeable with a single click, while an electronic library stores a vast collection of online data in place of printed books.

"Artificial intelligence (AI) and the internet of things have completely revamped society and we must continue innovating through networking and collaboration," said Sakamura, who is renowned as a pioneer of ubiq-



Dean of INIAD Ken Sakamura

uitous computing and TRON architecture. A further distinction of INIAD is how it fuses liberal arts subjects with finance, and business units with computer science, civil engineering and industrial design.

As such, computer science education, teamwork and communication skills are common core requirements taught across INIAD's four course streams. Programming skills are taught so that students can navigate the uncertain job terrain of the future, whereas teamwork is encouraged so that students can work with others and tackle shared tasks. The ability to communicate in

both English and Japanese is encouraged for conducting presentations and debates.

Of particular note is that all students learn the basis, framework and theory of information networking in their first year, while studies in liberal arts and other non-IT subjects are delayed until the second year of study. This is a different approach from most other universities, where general liberal arts subjects are usually covered within the first year.

INIAD class sizes are intentionally kept small, with only around 35 students per room to encourage active discussion and debate among students and their professors. The faculty also embraces a rich, student diversity, where non-Japanese, women, older students and those who are already working all form part of INIAD's student fabric.

"Ideally speaking, we want to raise our Japanese-foreign student ratio of 80-20, as well as that of male-female students of 65-35, to 50-50," said Sakamura. International students with limited Japanese language skills are given intensive training for smooth communication with their colleagues and professors.

The fully outfitted INIAD Makers' Hub, meanwhile, is a space where students can rapidly prototype new ideas. Drawing upon the availability of digital fabrication tools such as 3D printers, 3D scanners and laser cutters, as well as electronic measurement tools such as logic analyzers and oscilloscopes, students engage in the art of



An automated miniature car demonstration at INIAD TOYO UNIVERSITY

manufacturing and the modern day "maker movement."

"Such an environment allows the students to integrate various applications for objects such as voice-activated light switches using user actions such as swiping on the screen of their smartphones. This gives them a live feeling that they are actually broadening their environment through programming," Sakamura said.

Applying theory they have learned into action, students create various gadgets and devices, some of which help raise the quality of life. Examples include fully automated wheelchair prototypes that move freely from one room to another, automated doors, devices that can communicate and operate elevators, as well as fully automated miniature car models that move around, stop and change directions on INIAD's indoor circuit course.

INIAD, aware of the significance of lifetime learning and relearning, offers courses for those already active in the business soci-



ety, together with designing and executing custom seminars for various corporations. Collaboration with other universities and businesses through the Collaboration Hub for University and Business network is also a priority, as is carrying out joint projects with

partners in the European Union, Asia, North America and Japan, including government offices. INIAD is also maintaining close ties with big names in the global ICT industry.

For more information, see www.iniad.org.

Waseda University

(Sponsored content)

School widens its role in connecting students with the global community

Waseda University’s beginnings hark back to 1882, when samurai turned politician-cum-educator Shigenobu Okuma founded Tokyo Senmon Gakkō (Tokyo College). The institution acquired university status in 1902 and was renamed Waseda University.

Since its establishment, the university has sought to develop an international profile and produce graduates who contribute to the public good as global leaders. Waseda enrolled overseas students from as early as 1884, sent faculty members overseas via scholarship in 1900 and received a lecture by scientist Albert Einstein in 1922.

Today, Waseda continues to build a worldwide academic network that is open, dynamic and diverse, by focusing on the three pillars of research, education and social contribution.

“In terms of research, Waseda is collaborating with 12 other top-class universities in the Graduate Program for Power Energy Professionals (PEP Program), which aims to produce doctoral graduates to help develop electric and energy systems for tomorrow’s society. As the only private university adopted in the first year for the government-backed Doctoral Program for World-leading Innovative and Smart Education, Waseda emphasizes developing globally outstanding experts in such areas as nanotechnology and renewable energy,” said Aiji Tanaka, the university’s president.

Academic strength

Waseda is also leading the way with the research and development of basic algorithms and elemental technologies for a common software platform that promotes the flexible use of the quantum annealing machine, a machine that is expected

to resolve combinatorial optimization problems at high speeds. Resolving such issues is key due to the social demands for high-performance computing and the use of long-awaited technology in such industrial fields as mobility, finance and new drug development.

As part of other steps to further increase the caliber of its research and the education it provides, Waseda regularly invites top-level researchers to the university. Visiting professors from around the world conduct joint research and give lectures to the students.

“Their stays may range from several weeks to a year. But however short, the opportunity for our students to be exposed to globally cutting-edge research and engage in dialogue with the best researchers in their field is an invaluable experience that stimulates our students to truly become global,” Tanaka said.

Similarly, Waseda is making efforts to employ prominent faculty members from outside Japan to conduct lectures and discussions in English. Consequently, in fiscal 2018, Waseda outranked all other universities in Japan through its appointment of 158 international faculty members.

Management is also undertaking globalization efforts and appointing respectable external board members. These include Frances McCall Rosenbluth, a Damon Wells professor of political science at Yale University, as well as Yasuchika Hasegawa, a former chairman and current counselor of Takeda Pharmaceutical Co. Ltd.

Regarding good citizenship, Waseda students are enthusiastic volunteers, with roughly 25 percent of the university’s students — 10,000 out of the current total of

over 40,000 students — participating in volunteer activities every year. Registered under the Hirayama Ikuo Volunteer Center, these student volunteers work on domestic and international campaigns such as helping to build schools in developing countries, assisting with post-disaster reconstruction efforts, and drawing upon the Paralympics as inspiration for sports and disability-focused projects.

“It is important not only for us to attract worldwide attention as an academic leader conducting outstanding research and development, but to also produce students who make worthwhile contributions to society,” Tanaka said. He stated that Waseda places emphasis on the three pillars of research, education and social contribution, and these efforts would in the long run positively affect Waseda’s position in the QS World University Rankings (issued annually by a British education-related institution that evaluates universities around the world on a regular basis).

According to the 2019 QS rankings, five Waseda subjects (modern languages; classics and ancient history; mineral and mining engineering; sports-related subjects; politics and international studies), as well as one subject area (arts and humanities) were in the top 50 globally. Meanwhile, 11 other subjects and another subject area made the top 100 ranking.

Facilities

Waseda is also making strides with the opening of various on-campus facilities to help disseminate its activities. Certainly worth mentioning is the university’s plan to establish the International House of Literature for scholars of world literature and

translation, which was announced at a press conference in November. The facility will receive donations of works from world-renowned writer and Waseda graduate Haruki Murakami, famous for his novels, translations and book reviews that appear in 50 or more languages.

“With the compilation of such a fine collection, this archive is sure to become an ideal center of research and exchanges among all Murakami fans and literature lovers around the world,” Tanaka said.

Other Waseda museum facilities open to the general public include the Tsubouchi Memorial Theatre Museum, with its vast collection of over 1 million items dedicated to theater and dramas, as well as the Aizu Museum, exhibiting over 18,000 items of Eastern art, modern art and archaeology and the Waseda University History for Tomorrow Museum, preserving the history of Waseda University. There is also the Waseda Sports Museum that features photos, movies and displays of uniforms, shoes and trophies of Waseda athletes who competed in baseball and figure skating among other sports.

Resilient intellect and flexible sensibility are two important characteristics Waseda students should develop, according to Tanaka. He described resilient intellect as the ability to think through and generate solutions to problems to which no one knows the answers. “In general, maintaining a sense of academic open-mindedness is difficult when an individual grows too comfortable with their current environment and only interacts with like-minded people. To combat this, diverse encounters are necessary,” he said. Becoming exposed to people of different nationalities, languages, religions,



Waseda University President Aiji Tanaka SATOKO KAWASAKI

cultures and sexualities would foster flexible sensibility.

Global reach

Skills in broadening one’s mind can be honed by interacting with, and learning from, international faculty members and overseas students. Waseda has been steadily increasing its student enrollment from countries such as Australia, Canada, China, France, Germany, India, Indonesia, Italy, Malaysia, Myanmar, the Netherlands, Singapore, South Korea, Sweden, Thailand, the U.K., the U.S. and Vietnam. As such, the total number of international students at the university reached 7,942 in 2018.

Likewise, the number of Waseda students studying abroad has also been on the rise. Their choice of destination also spans many countries including the U.S., the U.K., China, France, Canada, Germany, Australia, Italy, South Korea, Spain and Sweden. The number of such students studying abroad reached 4,629 last year.

But Tanaka thinks these figures are still too low. He harbors high hopes that eventually all Waseda students will study abroad, since he firmly believes that they need to examine Japan from afar. “Our students should expand their perspectives and see how people outside Japan address global issues. Whether taking a job within or outside of Japan after graduation, each student needs flexible sensibility and resilient intellect to help solve unorthodox issues,” he said.

When Japan was trying to catch up with the achievements of the West, especially the U.S., after World War II, the Japanese had to find correct answers to many problems. Therefore, Japanese schools have been try-

ing to educate students who could quickly come up with correct answers. However, when Japan caught up with the West in the mid-1980s, it lost its model to chase. Soon after, the economic bubble burst in Japan, and Japanese universities had to change their teaching methods.

“Waseda University should now foster students who can come up with their own solutions to those problems because human beings now face problems to which no one knows the answers. Waseda University today has therefore strived to develop academically open-minded students who can observe and understand issues from different angles. Therefore, at Waseda, students should come up with a hypothesis as their own solution and verify its validity by showing evidence. Students need to be bold enough to restart this process and keep trying if their originally suggested hypothesis doesn’t work,” Tanaka said. “Waseda wholeheartedly welcomes students who can come up with solutions that even their professors might not even think of. This resilient intellect should be fostered with flexible sensibility at Waseda because these two characteristics will help drive today’s world toward a brighter future.”

Waseda University

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Above: The government-backed PEP Program launched in 2018 will use research and development sites such as the integrated energy management monitoring and control center for talented doctoral students’ education. Right: International students are seen on campus. WASEDA UNIVERSITY



‘Waseda Architecture’ symbolic of capital’s development

Functioning not only as broadcasting towers, but also as popular tourist spots among both Japanese and overseas visitors alike, Tokyo Tower and Tokyo Skytree are said to be symbolic of Japan. While general information about these structures can be found in virtually any travel guide, what is lesser known is how their designs connect them to Waseda University.

Tachu Naito, a former honorary professor of Waseda and a leading figure in architectural design, designed Tokyo Tower. He was also known as the “Master of Towers,” designing almost 60 throughout his career. His fame and reputation was established when Tokyo Tower was completed in 1958. This was two years after designing the second Tsutenkaku Tower in Osaka, measuring 103 meters high, and the 180-meter Nagoya TV Tower in 1954.

With specifications to design a “consolidated radio communications tower that would overtake the Eiffel Tower in height,” the task of designing the new tower was daunting, with Naito finding it much more challenging than any other task he had undertaken.

Naito embraced ideas of both structural integrity and beauty for Tokyo Tower and was said to have drawn as many as 10,000 design plans for the inno-

vative structure. After receiving final approval for his plans, it took 543 days and around 220,000 people to complete construction of the 333-meter high Tokyo Tower, making it taller than the Eiffel Tower’s height of 312 meters when its edifice was first built.

After completion, this new tower in

In addition to Tokyo Tower and Tokyo Skytree, two iconic landmarks embodying the past and present, many impressive buildings designed by Waseda graduates dot the Japanese archipelago.

the Tokyo metropolis came to unify the functions of the many small radio towers that came to being as a result of the sudden boom in TV broadcasting that began in the 1950s.

Almost 50 years on, many skyscrapers have shot up throughout Tokyo, blocking broadcast signals. This development prompted the need for a taller broadcasting tower to be built. Architectural firm Nikken Sekkei was responsible for designing the new tower, and two Waseda graduates, Tadao Kamei and

Shigeru Yoshino, were involved. This is how Tokyo Skytree, a modern symbol of Tokyo, came into being in 2012.

Also unknown to many is that this symbol’s distinctive design is the result of various restrictions. Above all, the land designated for Tokyo Skytree was both narrow and small, ruling out the use of a stable splayed footing design like Tokyo Tower’s. After many hours of research and discussion, a triangular base was adopted to ensure stability despite the cramped space. The tower’s upper area was to be rotund in design, with the top part transitioning from triangular to rotund. This irregular design gave the tower a distinctive curve and bend found in traditional Japanese buildings as well as a silhouette that shifts according to the direction from which it is viewed.

The new broadcasting tower also had a concrete cylinder built into its center. This engineering is an acknowledgment of the quake-resistant design of traditional Japanese five-storied pagodas that feature a central reinforcing pillar known as a *shinbashira*.

Although it is the world’s tallest free-standing broadcasting tower measuring a height of 634 meters, Tokyo Skytree was built to be highly durable against large earthquakes and storms; this is thanks

to the fusion of traditional skills with the latest materials and technology.

In addition to Tokyo Tower and Tokyo Skytree, two iconic landmarks embodying the past and present, many impressive buildings designed by Waseda graduates dot the Japanese archipelago.

Referred to as “Waseda Architecture,” these buildings not only stand out in terms of design and technique, but also harmonize with the environments of their respective cities, supporting citizens’ livelihoods. The pursuit of cutting-edge, yet welcoming design among Waseda architects will likely continue as designers create new architectural masterpieces; this is just one aspect of Japan’s contributions to the world.

Tokyo Tower was designed by Tachu Naito, a former honorary professor of Waseda University.
WASEDA UNIVERSITY / TOKYO TOWER



Turkish Airlines

(Sponsored content)

Enhanced Japan services accompany top-tier service

Providing flights to more countries than any other airline in the world, Turkish Airlines offers travelers comfortable passage to destinations across the globe. As it celebrates its 30th anniversary of flights to and from Japan, the airline continues to enhance services with exciting promotions and luxurious amenities.

Record-setting airline

Reflecting its reputation for world-class service, Turkish Airlines ranks No. 1 among all airlines in several categories. With an expansive destination network of 124 countries and 310 cities, the airline serves the most destinations from airport hubs in Europe. With a network of destinations that includes 114 cities across Germany, Italy, Spain, the Balkans and other European regions, Turkish Airlines provides convenient passage for travelers with connecting flights out of Istanbul.

"Turkish Airlines will continue to expand its flight network. In 2019, we will fly to Bali, Mexico City, Cancun and Rovaniemi," said Tuncay Eminoglu, vice president of sales in Asia and Far East. "Additionally, our fleet will grow in strength with new airplanes that will be delivered in the upcoming years."

Comfortable seating

Whether it's business or economy, Turkish Airlines provides high-quality services to satisfy the needs of all customers.

The spacious business class cabins feature "flying chefs," who serve exquisite delicacies, as well as a cutting-edge entertainment system. Boasting full-flat seats with nearly 180 degrees of recline, free Wi-Fi and live satellite broadcasting from NHK and other networks, business class cabins capture the essence of rest and relaxation for air travelers.

To enhance business class, Turkish Airlines has introduced two new services for intercontinental passengers. The first allows passengers to select their in-flight meal before boarding. Passengers departing from Istanbul can access pictures and other information on in-flight meals from the airline's website or app and select their preference in advance. The second, Dine on Demand — available on evening flights arriving at or departing from Istanbul — allows passengers to select their preferred dining time.



To commemorate the 30th anniversary of flights to Japan, professional soccer player Yuto Nagatomo (middle) of Turkish club Galatasaray was named a brand ambassador of Turkish Airlines. The airline also redesigned its crew uniforms to celebrate 85 years since its founding. YOSHIAKI MIURA

Economy passengers can also rest easy, knowing they are traveling in comfort. Passengers are treated to Turkish Airlines' award-winning in-flight meals, which feature various Turkish dishes prepared with fresh ingredients, and a selection of alcoholic beverages. Economy offerings also include slippers and eye masks, as well as abundant premium entertainment.

New crew uniforms

To celebrate the 85th anniversary of its founding, Turkish Airlines is introducing new, stylish crew uniforms. The uniform's design takes inspiration from several aspects of Turkish culture.

"Turkish Airlines brings a new elegant style to the skies with its new cabin crew uniforms," said Eminoglu. "Inspired by many classic elements of Turkish design and culture, the uniforms incorporate traditional patterns found in artisan glassware, ceramics and calligraphy, accentuated with contemporary textures and details."

Stronger Japan services

While this year marks the 30th anniversary of Japan flights, next year, Turkey and Japan will commemorate 130 years of friendly bilateral relations.

"Relations between Japan and Turkey have always been very special and positive

since 1890, which is considered the starting point of the friendship between our two great countries. We operated our first scheduled flight to Tokyo almost 100 years after that in 1989. Now, we operate daily flights, bridging our countries," Eminoglu said.

Amid the backdrop of these two historic anniversaries, as well as the lead-up to the 2020 Tokyo Olympic and Paralympic Games, Turkish Airlines is enhancing its Japan services.

From April to October 2020, Turkish Airlines will resume direct flights between Osaka and Istanbul, with five weekly flights servicing both directions.

"Osaka is a great destination to support our inbound and outbound flights. Since Japan has a target of 40 million inbound tourists by 2020, we believe that we are able to support this with our flights backed by our extensive network," said Eminoglu.

During this period, the airline will also enhance its servicing between Narita and Istanbul. The airline currently provides daily flights between the two metropolitan hubs — seven weekly flights in both directions — but will increase the number of flights in both directions to eleven. These flights will be serviced by state-of-the-art Boeing 787-9 airplanes with new seating in both economy and business.

Celebrating 30 years

The airline is marking the anniversary of Japan flights with a newly released commercial featuring star Japanese athletes Yuto Nagatomo, a professional soccer player with Turkish club Galatasaray, and professional golfer and 14-time Japan Golf Tour winner Hideto Tanihara. During their journeys around the world, Turkish Airlines' business class cabins provide these athletes the comfort needed to rejuvenate and maximize their performances.

The commercial highlights how the luxurious cabins are a "home away from home"



Above: Turkish Airlines boasts the largest network of flights in the world. Right: The new Istanbul Airport is equipped with high-end technologies, and offers a spacious lounge space for airlines. TURKISH AIRLINES

for these athletes, with high-quality services that provide ultimate relaxation.

"We regard Japan as an important market. Throughout our journey to promote our brand in Japan, we are excited to have these two great Japanese athletes, Mr. Nagatomo and Mr. Tanihara, join us as Turkish Airlines brand ambassadors," said Eminoglu.

A cutting-edge hub

Istanbul is a mere three-hour flight from over 50 countries, and with a new airport that just opened in October, the metropolitan center is poised to continue as a hub for global travelers.

"Istanbul Airport is a breakthrough for Turkish Airlines and the international aviation industry," said Eminoglu. "Its annual capacity is now 90 million passengers and it should reach 200 million passengers once fully completed. The airport offers airlines 22,000 square meters of space for lounges, and the airport is equipped with high-end technologies, resulting in an enhanced travel experience for passengers."

The new airport features three Turkish Airlines lounges: the business lounge, the Miles & Smiles lounge and one for domestic flights. In summer, the airport plans to open an additional two lounges, an exclusive lounge and one for arrivals.

The business lounge is 5,600 square meters, with 765 seats and 13 personal rooms with showers. In collaboration with the Istanbul Museum of Modern Art, the lounge features an art display for guests to enjoy while waiting for flights. At the Miles



& Smiles lounge, guests can look forward to a golf simulator and a kids area, in addition to a space with virtual reality entertainment that will be introduced soon. The domestic lounge, which is accessible from an entrance outside the terminal, offers abundant amenities, including comfortable sofa seating, Turkish dining, a spacious kids area, numerous televisions and prayer rooms.

"The new airport is the biggest infrastructure project in the history of Turkey, and once all phases are completed, it will not only be Turkish Airlines' home base, but also one of the world's largest flight hubs," Eminoglu said. "It's revolutionary in terms of new technology and service implementation and marks a new era in the history of Turkish Airlines. It's also important for the company's growing strategy. As a new hub for Turkish Airlines, the airport allows us to offer enhanced experiences and high-end transit capabilities to our passengers."

Services for transfer passengers

Turkish Airlines presents passengers with layovers several opportunities to appreciate

the wonders of Istanbul.

A new stopover program campaign, called "Yottoku Istanbul," started in 2018. Passengers who purchase round-trip tickets for flights with a layover in Istanbul spanning 20 hours or more will receive hotel vouchers for lodgings in Istanbul. Economy passengers will receive a voucher for one night at a four-star hotel and those in business will receive a voucher for two nights at a five-star hotel.

Another exciting campaign from Turkish Airlines is its Touristanbul service. Available to passengers with a layover in Istanbul lasting between six and 24 hours, this service treats travelers to a free tour of Istanbul. After being picked up by a tour guide at the airport, travelers can use their layover time to experience the city's beautiful sights and delicious regional cuisine.



Tuncay Eminoglu, vice president of sales in Asia and Far East
TURKISH AIRLINES



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TURKISH AIRLINES

JR West tourism

(Sponsored content)

Shinkansen eases trips from Kansai to Setouchi, Hiroshima

The picturesque Seto Inland Sea area of western Japan is a popular tourist destination, home to a variety of scenic beauty, historic attractions and a rich culinary heritage.

The region is a hop away from major Kansai cities such as Osaka, Kyoto and Kobe. It's easily accessible thanks to the Sanyo Shinkansen, arguably the area's easiest and most convenient mode of transportation.

The region's Hiroshima Prefecture has something to entice any inbound traveler.



Fresh oysters (above) and savory *okonomiyaki* Japanese pancake HIROSHIMA PREFECTURE

The capital city of Hiroshima is perhaps best known for the Atomic Bomb Dome, designated as a World Heritage site in 1996. The site forms part of the Hiroshima Peace Memorial Park, which is also home to the Hiroshima Peace Memorial Museum.

A short ferry ride away is Miyajima Island, long regarded as one of the "Three Views of Japan," along with Matsushima in Miyagi Prefecture and Amanohashidate in Kyoto. Visitors to the island are recommended to see the famous Itsukushima Shrine, with its brightly colored pavilions



Itsukushima Shrine on Miyajima Island GETTY IMAGES

and "floating" torii gate.

For gourmands, Hiroshima has much to offer thanks to the bountiful food the inland sea area provides.

The prefecture is the country's top producer of oysters, boasting a cultivation history dating back 400 years. Fresh and succulent oysters are available at many restaurants and eateries.

Okonomiyaki (savory Japanese pancake) is another famous local dish visitors should try. The food contains ingredients such as cabbage, eggs, meat and noodles.



The Atomic Bomb Dome in the city of Hiroshima HIROSHIMA PREFECTURE

History, botanical wonders and the arts await in Okayama

Okayama Prefecture is blessed with minimal rain and mild temperatures, making the area famous for high-quality fruit. However, travelers to the area will find a bounty beyond delicious produce.

Recommended historic spots include Okayama Korakuen Garden, which dates back about 300 years and was awarded three stars by the Michelin Green Guide Japan. Located in the prefecture's capital, a trip to the garden can be combined with

the well-known Okayama Castle nearby.

The city of Kurashiki is famous for its picturesque merchants' quarter, where white-washed earthen buildings allow visitors to appreciate a well-preserved townscape.

Visitors heading to the Seto Inland Sea this year can explore art exhibits at the Setouchi Triennale 2019, which is being held on various islands including those in Okayama. The festival's theme is "Restoration of the Sea" and is split into spring, summer and fall sessions.



Yayoi Kusama's artwork "Red Pumpkin" is exhibited on Naoshima Island at the Setouchi Triennale 2019. "RED PUMPKIN" ©YAYOI KUSAMA, 2006 NAOSHIMA MIYANOURA PORT SQUARE PHOTO/DAISUKE AOCHI



Okayama Korakuen Garden, with Okayama Castle in the background, is located in the prefecture's capital. OKAYAMA PREFECTURAL TOURISM FEDERATION



Kurashiki's traditional townscape OKAYAMA PREFECTURAL TOURISM FEDERATION



Okayama is known for its high-quality fruit. OKAYAMA PREFECTURAL TOURISM FEDERATION

Grand views from unique trains



Clockwise from top left: Ametsuchi (between Tottori and Izumoshi); marumaru no hanashi (Shin-Shimonoseki and Higashi-Hagi); La Malle de Bois (Okayama and Uno, Onomichi and Kotohira); SL Yamaguchi (Shin-Yamaguchi and Tsuwano) WEST JAPAN RAILWAY CO.

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