Slovenia — an excellent partner in Europe and beyond

Jurij RIFELJ
Ambassador of the Republic of Slovenia to Japan

Jurij Rifelj has served as the Ambassador of the Republic of Slovenia to Japan since 2023. A career diplomat, Ambassador Rifelj previously served as Slovenia's Ambassador to Australia, and non-resident Ambassador to Indonesia, Malaysia, New Zealand, and ASEAN (2018–2022). He also headed Slovenia's Representative Office in Palestine and held senior roles in the Ministry of Foreign Affairs, including Head of Public Relations and Coordinator for Hybrid Threats. His earlier assignments include positions with NATO in Brussels, the Ministry of Defence, and the Embassy of Slovenia in Washington, D.C.

Slovenia's Identity and Foundations of Success

Slovenia is a country located in Central Europe, defined by three important dimensions geographic dimensions – Alpine, Mediterranean and Pannonian. Not one of the biggest European countries, population of 2.1 million, but the quantitative aspect is not the only criterion worth applying when assessing Slovenia. What predominantly defines Slovenia is its people and their historic evolution into one of the most successful countries on the globe. The fact that all the Slovenia's neighbours are bigger than Slovenia speaks about the historic resilience of Slovenian people. We gained our full and internationally recognized statehood 35 years ago meaning that we have been in full control of our fate and development less than forty years. This is not much in comparison to the fact that Slovenia as a nation or a specific ethnic group has been in existence for over 1400 years.

A question arises what is the foundation of Slovenia's contemporary success. Under the circumstances when throughout the centuries the external factors determined the development dynamics of Slovenian people one had to become resourceful. We had to perceive the environment in an out-of-the-box fashion as the "box" was not ours. A reaction to this situation was to embrace all kind of innovation on micro or grass-root level. Therefore, one can say that innovation has become an integral part of the Slovenian cultural DNA. The ability to display our innovation skills has skyrocketed since becoming an independent country, founded on the values of democracy and open society. Additionally, the possibility of freely cooperating with different international partners has boosted our innovation skills.

This innovation skill has become a cornerstone of turning the limited Slovenia's natural conditions into many successful business stories, a lot of them with a global reach. However, only the innovative mode could not bring proper results without being closely supported by another typical Slovenian feature. That is hard and dedicated work. The combination of these two elements made Slovenia a success story.

Last, but not least the element political proximity between two like-minded countries, Slovenia and Japan additionally bolsters various possibilities of cooperation between our two countries.

Strategic Advantages: Location, Workforce, and R&D

As mentioned before Slovenia has, and this process is far from finished, turned its natural conditions to its advantage. One of them is definitely its geographic location which makes it one of the important crossroads of Europe. In the second half of the last century Slovenia built its only port, Port of Koper, practically from the scratch. Today the Port of Koper happens to be one of the key ports in the Adriatic, serving as a gateway to Europe. It has become the biggest maritime hub for many Central European countries, with special importance for cargo originating from and destined to Asia. The Port of Koper has also established itself as the second biggest automotive port in the whole of Mediterranean. Taking into consideration the fact that the Nissan electric model "Sakura" will be assembled in Slovenia there are additional

possibilities for the usage of this port by the Japanese business entities.

From this, static, point of time highly educated and skilled workforce can also be considered as one of Slovenia's natural conditions. It is a product of a long time, carefully planned and sustained effort to build a highly educated and skilled workforce, based in the excellent education system. This is best demonstrated by numbers stating that: 32% of workforce have a university degree, 28% of students graduate in science and engineering and 98% of the working population speak at least one foreign language and 83% speak two foreign languages.

An integral part of further building a highly educated and skilled workforce is the government-led financial incentives to strengthen the R&D sector by offering tenders and programmes as well as 100% tax deduction on R&D expenses. In terms of the R&D personnel per capita Slovenia is ranked 15th worldwide and 8th in Europe. 2.14% is allocated to the R&D and 70% is funded by the business sector.

Slovenian (public) research institutes have a strong track record of cooperation with companies — not only Slovenian, but also global enterprises – and they represent an important element of the Slovenian R&D dimension. Their work includes magnesium battery research in cooperation with the Japanese automotive sector, advanced coatings for concentrated solar power plants, and the development of more efficient and cost-effective catalysts for hydrogen fuel cells. They are also very active in medicine and biotechnology, with several successful spin-offs currently seeking partners and investors. And finally, Slovenia is home to the first UNESCO International Research Centre on Artificial Intelligence as well as, together with Japan, a founding member of the Global Partnership for Artificial Intelligence. In this context it is worth mentioning that some Slovenian software companies are already providing highly sophisticated business solutions to some big Japanese corporations.

Business Environment and Key Export Industries

Slovenia is very mindful of providing and securing a highly stimulating business and investment environment. It is open to foreign direct investment and ranks as the third least restrictive economy among OECD members. There is a competitive corporate income tax rate of 22%, with a number of targeted exemptions and special regimes. The VAT system is clear and predictable, with a standard rate of 22%, a reduced rate of 9.5% for selected goods and services, and VAT exemption for exports. Importantly, Slovenia provides attractive tax incentives for investors, beside research and development, also with respect to employment, digital transformation, and the green economy, including investments in equipment, intangible assets, and advanced technologies.

All the above-mentioned facts substantially contribute to the vitality and dynamism of the Slovenian economy. Slovenia is highly integrated into international economy which is reflected in a fact that its export of goods and services surpasses 80% of GDP.

There are many internationally successful companies but here it is worth mentioning two manufacturing sectors that contribute a big share to the Slovenian exports and display main features driving the Slovenian success, innovation and hard and dedicated work.

Biotechnology

First sector is the Slovenian biotech industry. It is maybe not that well-known fact that Slovenia is one of the five largest drug-manufacturing nations in Europe. Slovenian companies have developed world-class products in areas such as biosimilar medicines, proton therapy equipment, medical lasers, and bioprocessing technologies used in the production of gene-therapy drugs and vaccines. In the context of Japan, one should mention the Slovenian company Fotona, one of the global leaders in the field of medical lasers and well-established in the Japanese medical environment.

This sector also includes a strong base of innovative SMEs developing advanced equipment and processes for the pharmaceutical and biotechnology industries, including automated visual inspection systems. The leading pharmaceutical companies operating in Slovenia include Krka, Lek (a Sandoz company), and Novartis Slovenia. Overall, the biotechnology and healthcare sector is one of the most dynamic parts of the Slovenian economy, driven by cutting-edge research, strategic partnerships, and significant investment by innovative companies. Supporting this ecosystem, Ljubljana Airport has become the leading logistics hub for pharmaceutical

products in Central and Eastern Europe.

Automotive

Second sector is the Slovenian automotive industry. The sector accounts for 20% of Slovenia's total exports and contributes 10% to the country's GDP. This export is composed of motor vehicles; parts, and accessories for motor vehicles; silencers and exhaust pipes, trailers and semitrailers of caravanning type. The fact that Slovenian company Adria Mobil holds the biggest share of the imported recreational vehicles to Japan represents a proof of a high level of the Slovenian automotive industry. Slovenia is also a global leader in the production of high-value automotive components, including titanium exhaust systems, diesel cold-start systems, and gas springs. There are many opportunities for Japanese and other foreign partners to establish mutually beneficial cooperation with Slovenia, especially as the testing market for new operating vehicle systems and through development and supply of electrical components and software for smart, autonomous and electric vehicles.

Stability, Safety, and Japan–Slovenia Cooperation

Slovenia also pursues policies of a socially responsible country. We are aware of the socio-economic stability aimed at establishing a conducive, sound and stable environment for a sustainable economic development. Such policies are clearly demonstrated in the fact that Slovenia has the second lowest Gini Coefficient globally. On the top of that or better integrally connected to it is the fact that according to the Global Peace Index Slovenia is the 9th safest country in the world.

Last, but definitely not least it is important to point out that several Japanese companies have already recognized the advantages of Slovenian business environment. This recognition led to the establishment of very productive business cooperation, surpassing basic business transactions, with companies such as Yaskawa Electrics, Kansai Paint, Daihen, Nippon Paint.

One should also mention a joint project between Slovenia and Japan in the field of renewable sources of electric energy and smart grids. The projected, started in 2016 and concluded in 2021, received an OECD award for the best of its kind.

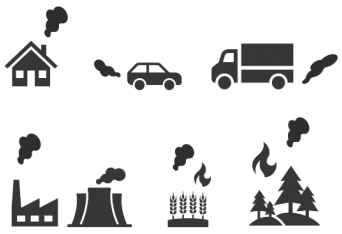
Japan can in Slovenia, a member of the European Union and NATO and with all its presented advantages find a highly reliable and predictable partner. Something that nowadays is a rare commodity in high demand.

>>> Spotlight on a Slovenian Company

Aerosol Magee Scientific: Keeping an Eye on the Air

Why Black Carbon Matters for Health and Climate

Clean air is one of the defining societal priorities of the 21st century. The World Health Organization identifies fine particulate matter (PM2.5) as a major health risk, linked to cardiovascular and respiratory disease and millions of premature deaths each year. Within PM2.5, black carbon and other carbonaceous aerosols are among the most harmful components because they penetrate deeply into the lungs and strongly absorb sunlight, contributing significantly to climate warming. The UN's Intergovernmental Panel on Climate Change recognizes black carbon as the second most important climate warming agent after CO_2. These findings underscore a simple reality: **reliable, scientifically proven measurement is essential to protect public health, guide policy, and strengthen climate resilience.**



Sources of black carbon

The Aethalometer - The World's Most Trusted Black Carbon Monitor

Aerosol Magee Scientific, the company behind the

Aethalometer has led this field for nearly 50 years. Our instruments provide high resolution, real time measurements of black carbon and related aerosols, delivering reliable data to researchers, regulators, and industries worldwide. Thousands of Aethalometers operate on all seven continents, and their data have been cited in more than 10,000 scientific publications, establishing the Aethalometer as a globally recognized standard for black carbon measurement. Without accurate measurement, mitigation strategies remain speculative; with it, they become actionable.

Clarity Where Traditional PM2.5 Monitoring Stops

Our technology is designed to provide clarity where traditional PM2.5 monitoring stops. While general PM2.5 values indicate how much pollution is present, they do not reveal what types of particles are in the air or where they originate. Aerosol Magee Scientific's instruments help distinguish pollution from traffic, biomass burning, industry, and other sources - information that matters for public health interventions, targeted regulation, and efficient environmental investment.

Our wider ecosystem of field and laboratory instruments, complemented by dedicated software tools, provides a streamlined yet scientifically robust platform for comprehensive aerosol analysis. The goal is not complexity, it is **reliable, interpretable data** that support air quality networks, regulatory compliance, climate research, and public health assessments.

A Global Leader Ready to Support Japan's Air Quality and Climate Priorities

As Japan advances its commitments to clean air, decarbonization, and sustainable urban development, Aerosol Magee Scientific stands ready to contribute as a trusted partner. Our instruments support leading networks in Europe, the United States, China, and India, regions with diverse environmental challenges and rigorous regulatory frameworks. These global experiences give us a deep understanding of how high quality data strengthen national policy design, industrial emissions management, and long term climate strategies.

Aethalometer: Smartest way to monitor black carbon: traffic and biomass burning pollution

Japan's scientific excellence, strong environmental institutions, and forward looking investment policies make the country an ideal location for deeper collaboration. We aim to build connections with Japanese universities, atmospheric researchers, government agencies, and regulatory bodies to enhance data comparability, share methodologies, and support Japan's long term air quality and climate objectives.

Scientific Expertise That Matches Leading Research Institutions

What distinguishes Aerosol Magee Scientific in this effort is not only our technology, but our **research culture**. We are one of the few companies in the world whose internal scientific team publishes peer reviewed research and presents at international conferences at a level comparable to universities and research institutes. This dual identity - instrument manufacturer and scientific contributor - allows us to work directly with experts, discuss scientific challenges on equal footing, and translate emerging research into practical, high quality measurement solutions. We do not merely supply instruments; we advance the science that underpins air quality and climate policy.

By combining Japan's scientific and regulatory strengths with our global experience, Aerosol Magee Scientific can help generate the reliable data and scientific insights needed to support healthier communities, informed regulation, and effective environmental decision making. Our guiding principle remains constant: **Good Data. Good Science. Good Policy.**