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Season's Greetings from JETRO Geneva



Mont Fuji is majestic in winter too!

Dear readers,

New challenges are affecting Japanese and Swiss companies while they are just starting to get over the pandemic. Nonetheless, they are doing extremely well considering the context and thus, proved once more how resilient they are.

We will continue our best efforts to support them in 2023 after a short break from December 29th to January 3rd.

We wish you all a lovely holiday season!

Kind regards,
JETRO Geneva's team

Strong interest in Swiss hydrogen tech from Japanese companies

Many companies attended JETRO's seminar on hydrogen on November 29th

Hydrogen is a promising resource, and efforts are being made to improve its efficiency and reduce the cost. JETRO Geneva and the Greater Geneva Bern area organized a seminar to present Swiss companies working in the field of hydrogen to Japanese companies.

Over 60 companies joined this one-hour seminar. Afterwards, JETRO helped many of them schedule business meetings.

The potential of green hydrogen

Hydrogen is still predominantly produced using natural gas. Be-

cause of its environmental footprint, this method has limitations. Hydrogen can, however, be produced using 100% renewal energy and water. Once the hydrogen is produced, it can be compressed and stored for long periods of time. It can be used to stock excess energy produced by a solar or wind farm when weather conditions are good. It can also be used for mobility because it eliminates the need for a heavy battery.

Once in contact with oxygen, hydrogen will react to produce water and energy.

Costs and efficiency are the challenges

In theory, hydrogen's potential is huge. Produced from water, it powers electric engines with zero emissions other than water. Nonetheless, two main challenges must be addressed before a massive usage of it becomes possible.

The cost of the fuel cell is still high. The fuel cell is made of electrodes that use oxygen and hydrogen to produce electricity. Currently, they require expensive materials.

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Strong interest in Swiss hydrogen tech from Japanese companies

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The second challenge is efficiency. Electricity is needed to produce hydrogen by splitting water atoms (H₂O) using a technique called electrolysis. Later, the hydrogen will produce electricity when put in contact with oxygen. Over the process, some energy is lost. Here the challenge is to reduce this loss as much as possible. In this regard, a battery is currently more efficient. When hydrogen is in contact with oxygen, it will produce energy and water.

Cleantech Alps

[Cleantech Alps](#), created at the initiative of western Switzerland's Cantons, is the force driving regional and national activities to promote the development of the cleantech sector in Switzerland. It fosters cooperation between the economy, the academy and the public sectors and gives stakeholders greater visibility and access to

networks. As a technology generalist and specialist in cleantech innovation systems, Cleantech Alps can put you in touch with the most appropriate contact for your needs.

WattAnyWhere

At [WattAnyWhere](#), they believe clean energy should power our planet and that it should be accessible to anyone anywhere. Fuelled by this vision, they purposefully innovate to accelerate the world's transition to renewable energy. WattAnyWhere has created a high-powered bioenergy fuel cell system that provides resilient off-grid electricity. It is compact, scalable, and transportable, offering users the freedom to operate independently – without disruptions from grid failures or unpredictable global energy supplies. They believe sustainable energy doesn't have to be complex and intimidating. WattAnyWhere's clean power is available on demand to simplify life and empower users to play an integral role in the clean energy movement.

SoHHytec

[SoHHytec](#)'s mission is to empower nature by creating tomorrow's solutions today. SoHHytec is a caterer for solar fuel and energy needs where it deploys proprietary "Arb" - artificial tree technology. It develops gardens and forests for providing green hydrogen and power as a service. SoHHytec's patented solution works with sunlight and water to give you direct green hydrogen production at >2x the efficiency, additionally co-generating electricity, medical-grade oxygen, and heat. SoHHytec's Arb's offer a plug-and-play solution for distribution as well as centralized production of fuel and power.

GreenGT

[GreenGT](#) is an independent company active in the field of electric hydrogen technologies. It analyses, designs, develops, carries out and sells studies, products and services applicable to motor sports, the mobility industry and also to infrastructures and regions.

Survey on business condition of Japanese companies overseas

分析

ANALYSIS

JETRO conducts an annual survey among Japanese companies worldwide. This year, 7,173 companies have answered providing an exceptional overview of business conditions, challenges, and expectations. Regarding Europe, 857 Japanese companies (or affiliated) have answered from 22 countries. Here are

the key findings:

1. Zero-COVID policy worsens business performance and hinders business expansion

65% of the approximately 7,000 Japanese companies operating overseas are expected to achieve profitability in 2022, but losses in the

automotive parts industry and other industries will increase. Due to the Zero-COVID policy, more than 40% of companies in China suffered deterioration in business performance. Exceed the rate of improvement.

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Survey on business condition of Japanese companies overseas

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45% of enterprises expand their business locally in the next 1-2 years. Not returning to the level before the COVID-19 pandemic. Cost increases are a drag. On the other hand, the reluctance to invest recovered in the fields of human resources and food and beverage services due to the lifting of operational restrictions and behavioral restrictions.

2. Accelerate supply chain review and localization of management. Emerging trend of expatriate staff reduction in Asia.

60% of manufacturers and a majority of total will work to review their supply chains in the future. The strategy of localization of procurement, production, and sales is accelerating due to soaring raw

material and transportation costs and the emergence of supply disruption risks.

Over the next one to two years, the number of expatriates will be reduced compared to the level before the new corona crisis, while the number of local employees will increase. The evacuation and temporary return of expatriates in the event of the COVID-19 pandemic, as well as the establishment of remote operations, have also accelerated localization.

3. More than double the number of enterprises engaging in green procurement from the previous year. The delays in the initiative lead to opportunity losses in the market.

30% of companies implement human rights due diligence (HRDD).

In Europe, where legislation is progressing, requests from business partners support HRDD implementation. At SMEs, however, the issue is "understanding of human rights."

More than 40% of enterprises have "already engaged in efforts" with regard to decarbonization (reduction of greenhouse gas emissions), an increase of nearly 10% over the previous year. More than twice the number of enterprises engaging in green procurement (requiring suppliers to de-carbon). There is also a risk that unmet transactions opportunities will be limited as awareness of reduction spreads rapidly throughout the supply chain.

The full report is available on our [website](#)

分析

ANALYSIS

Ambassador Fujiyama represents Japan in Switzerland

H.E. Ambassador Yoshinori FUJIYAMA has taken office at the end of November as new Ambassador of Japan to Switzerland. He succeeds Ambassador Kojiro SHIRAI-SHI who took office in 2019 and has now returned to Japan.

In his message available on the Embassy's website, Ambassador Fujiyama points out the fundamental values Japan and Switzerland share. Such freedom, democracy, rule of law, and respect of human rights. The two countries will have a lot to discuss over the next few years. Both will have a seat at the

UN security council for the 2022-2023 period.

Plus, an important milestone will be celebrated in 2024 with the 160th anniversary of the establishment of diplomatic relations.

In 2025, the World Expo in Osaka will take place, a major event for Japan. Switzerland already confirmed its presence with a pavilion on innovation.

Read the full message on the Embassy's [website](#) (in Japanese or German).



Ambassador Fujiyama

動向

TREND

革新

INNOVATION

JETRO showcasing 36 startups at the CES including 7 Award honorees

This year, JETRO supports 36 selected Japanese startups by providing them a global stage at the Consumer Electronic Show (CES) in Las Vegas from January 5th to 8th. This is part of the J-Startup program financed by the Ministry of Economy Trade and Industry. Seven of them have honoured with a CES Innovation Award setting a new record!

This month, we briefly introduce the first three of them. Next month, we will cover the other four.

The detailed list of the 36 companies is available [here](#).

AGRIST Inc. – “L”

Category: Robotics

The “L” robot is an automatic bell pepper harvesting system that uses [AGRISTS'](#) proprietary AI algorithm and a combination of different types of cameras to enable it to identify and pick harvest-ready peppers with millimeter precision through layered leaves. It patrols

farms daily to monitor crop growth, providing farmers with advice on optimal farm management.

Algal Bio Co., Ltd. – “Moneru”

Category: Food & Ag Tech

[Algal Bio](#) promotes algae-derived products and solutions via their “Algae Biofoundry Platform” which is based on 20+ years of research by the University of Tokyo. The Platform enables them to identify ideal algae strains for various applications from wellness to bioplastics, including “Moneru” a functional food made with natural ingredients

that can improve one’s quality of sleep.

Ashirase, Inc.

Category: Accessibility

“[Ashirase](#)” is a wearable navigation system that assists the visually impaired with walking. The system consists of a smartphone app and an in-shoe vibration device. Ashirase’s intuitive instructions via vibration can guide users to their destinations more safely without obstructing their hearing – a sense that is critical to the visually impaired.



Japan (J-Startup) Pavilion will host 36 rising startups / Source: [JETRO](#)

Agenda

✓ Stay tuned!

活動

AGENDA

JETRO is a government-related organization that works to promote mutual trade and investment between Japan and the rest of the world. Originally established in 1958 to promote Japanese exports abroad, JETRO’s core focus in the 21st century has shifted toward promoting foreign direct investment into Japan and helping small to medium size Japanese firms maximize their global export potential.

The JETRO Switzerland Newsletter can also be viewed and/or downloaded online: <http://www.jetro.go.jp/switzerland/newsletter>

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