

Investor InterviewIdemitsu Innovation Europe AG

Fumiaki Tarui
President
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https://www.idemitsu.com/en/company/rd/cvc/index.html

Please can you explain the main activities of your company in Europe

Idemitsu is a Japanese company engaged in the development, manufacture, and sales of a wide variety of energy sources and materials in the areas of petroleum, basic chemicals, high-performance materials, power/renewable energy, and more. We established Idemitsu Innovation Europe as a wholly-owned subsidiary in Switzerland in 2017. The subsidiary's initial purpose was to focus on developing new material technologies, building on the foundation of a joint development project with BASF that had commenced in 2012.

Since then, most of our R&D facilities were relocated to South Korea to be closer to some of our major corporate customers. Now, our Switzerland office has a new role, acting as a dedicated innovation hub for the whole of Idemitsu group. The hub now has 11 members, including 5 PhDs.

The company's activities are split into two main sections – the Incubation Unit, and the Venture Capital Unit. The Incubation Unit combines new business development, academic collaborations and startup engagement. The Venture Capital Unit operates Idemitsu's CVC and has three staff members in Switzerland, in addition to one in Japan, and one in the US.

The CVC has two strategic focus themes: 'Energy' – including carbon neutral energy generation, synthetic fuels and hydrogen, and 'Materials' – including new materials for biotech, life sciences, electrification and data centre applications. It has a €60 million fund covering Europe and the US.

Why did the company choose Europe for its innovation activities?

The main purpose of creating our office in Europe has been to observe key trends, especially relating to climate change regulations and policy. The EU is usually the first-mover for most new sustainability laws, and Japan often adopts similar approaches – so Idemitsu hoped to be able to understand what the regulatory landscape in Japan might look like in the future by following developments in Europe.

Additionally, the likely future similarities in policy and regulations means that any collaboration or joint development projects with startups in Europe will be more easily expanded and replicated in the Japanese market.

In terms of how we actually operate in Europe, our CVC has been set up using <u>Emerald Technology Ventures</u>' unique CVC as a Service model, which will help us to explore investments and partnerships with startups working on a range of technologies in our areas of interest. Under this approach, Emerald handles all the CVC investment activity, which allows us to focus on our strategic goals, capturing the value of working with start-ups and bringing new technologies and solutions to scale.



What are the main benefits for a European startup looking to work with Japanese corporates?

There are some cultural similarities between Europe and Japan, perhaps more so than with the US, which can make it easier for European and Japanese partners to collaborate. Furthermore, the tendency for the Japanese government to adopt similar climate policy to the EU means that if a startup has been successful in this field in Europe, it is likely to also have a strong business case in Japan. Working with a Japanese corporate will help them to gain market access and accelerate their expansion in the country as part of a long-term partnership.

What do you think are the main challenges for a European startup when working with a Japanese corporate?

The biggest issue we have noticed when working with European startups is the misalignment in expectations of how the partnership will work and the timeframes involved. Startups are usually very fast-moving and eager to implement something right away and see clear results. However, Japanese corporates need a lot of time for decision-making and will want to evaluate different courses of action before progressing. It will also be dependent on external factors such as wider market conditions and potential customers.

How can startups best approach a collaboration to overcome these challenges?

Patience is vital because it can be a lengthy process waiting for the corporate to gain consensus from all relevant people internally. It is important that all parties have time to fully consider and understand the possible collaboration before reaching an agreement. This can sometimes be frustrating for startups who want things to progress more quickly, so it can be important that expectations are managed from the beginning of the conversation.

However, I'd like to stress that once an agreement has been confirmed, individual decisions can often be made much more quickly, and things will begin to progress at pace. The benefit to working with a Japanese corporate is that once they have bought in, they will also remain committed to the partnership for the long-term, and it can lead to many opportunities.

Can you tell us about any academic partnerships you are currently pursuing?

We are fully engaged in contact with leading universities and institutions in Europe, such as ETH Zurich and EPFL in Switzerland, Imperial College London in the United Kingdom, and Wageningen University and Research – a leading agricultural university in the Netherlands.

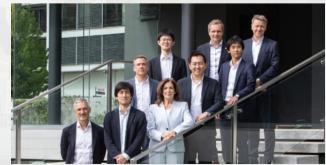
Through this open innovation activity, we will contribute to the creation of new value and new business from Europe.

What kinds of startups are you particularly interested in working with?

Within the low carbon energy field, our CVC is actively looking for new companies relating to synthetic fuels. We are especially interested in those developing direct-to-X technology, which can reduce the number of intermediary steps in the production of e-fuels, for instance producing methanol from CO2 within a single process.

In the field of advanced materials, we are interested in companies relating to the circular economy, plastic recycling, and new packaging materials. We are also looking for innovative new materials which can be used in ICT infrastructure and data centres.

Image: The Idemitsu team with Emerald Technology Ventures (August 2024: <u>link</u>)





Partnership Focus: Europe & Japan Success Stories



Yamagata University x Holst Centre

The TNO Holst Centre and Yamagata University have recently concluded a comprehensive partnership agreement to promote innovation in sustainable electronics.

The Holst Centre, established in 2006, is an independent Dutch R&D centre that aims to commercialise printed and flexible electronics.

The collaboration with Yamagata University – which has established itself as an international research and development hub for printed and flexible electronics – will see the two organisations collaborate to 'create the electronics of the future'. Yamagata University will serve as a bridge between TNO Holst Centre and Japanese companies and institutions to drive global innovation.

METRON x Fujitsu

METRON is a French energy management and optimisation software developer. It has formed a strategic agreement with Fujitsu to jointly develop a new energy management service which combines Fujitsu's quantum-inspired data and AI technologies with METRON's energy solutions. The new tool will run high-speed simulations to support decision-making and enhanced energy optimisation for manufacturing plants as well as commercial facilities and offices, with an initial focus on the German and Japanese markets.

The partnership is a continuation of an ongoing relationship between the two companies following an investment into METRON by Fujitsu Ventures, the company's CVC, in March 2023.





Partnership Focus: Europe & Japan Success Stories



DeepL x Panasonic Connect

DeepL is a German communications platform powered by Language Al. The company has been working with Panasonic Connect for both translation and writing improvement, allowing its teams to communicate with confidence across borders. Established in 2022, Panasonic Connect Co. plays a central role in the growth of the Panasonic Group's B2B solutions business.

Panasonic Connect noted in a recent interview with DeepL that it has an increasingly global customer base – and in this environment, communication issues naturally arise on a daily basis. To help solve this, Panasonic has adopted DeepL Pro solutions for businesses (Write and Translator) – and is considering adoption of various other technologies and Al strategies to help continually ensure proper communication.

Marubeni x D-Orbit

Global space-tech company D-Orbit, headquartered in Italy, is developing space logistics infrastructure to enable the growth of the space transportation and in orbit servicing economy. Marubeni corporation led D-Orbit's €150 million Series C round, which closed in September 2024. The investment builds on a long-term partnership between Marubeni and the scale-up, which has included an exclusive agency mandate for D-Orbit's services, initially in Japan, before being expanded to cover Southeast Asia.

Marubeni aims to become a comprehensive provider of satellite solutions through the partnership. It is not alone in actively investing in space tech – Japan is second only to the US for total corporate investment in space tech startups, with Japanese corporates participating in 12 of the 20 rounds held in 2024



Partnership Focus: Europe & Japan Success Stories



East Japan Railway Company x University of Birmingham

The University of Birmingham is a hub for rail research and innovation in the UK and is home to the Rail Innovation Cluster at the Birmingham Centre for Railway Research and Education. The University has signed an MoU with East Japan Railway Company (JR East) to conduct joint research and innovation relating to cutting-edge rail technologies and new ways of staffing the railways.

Experts from JR East will join the Cluster which works closely with startups in the UK and wider Europe to run demonstrators and testing programmes across a range of technical areas. The partnership will enable closer collaboration between rail experts from Japan and Europe, both within industry and academia.

Japanese Ministry of Education, Culture, Sports, Science & Technology x First Light Fusion

First Light Fusion is a spin out from the University of Oxford specialising in nuclear fusion technology. In July 2024 it hosted a delegation from the Japanese Ministry of Education, Culture, Sports, Science & Technology (MEXT) as part of a wider collaboration between the UK and Japan to commercialise fusion. The visit included a round table session between both parties and a tour of the startup's technological facilities.

The Japanese Government has designated fusion research a key pillar within its future energy strategy and launched the 'Fusion Energy Innovation Strategy' in April 2023 which includes collaboration with UK startups, academia and public sector players.





Innovator Spotlight

Fujitsu Research of Europe

Fujitsu Research of Europe represents Fujitsu's research efforts in Europe, focusing on developing cutting-edge technologies through a unique co-creation approach. We work directly with customers to solve real-world challenges in today's digital society.

Fujitsu Research of Europe (FRE) drives Fujitsu's research activities across Europe, with offices near Heathrow in the UK, as well as in Madrid and Tel Aviv. While officially established in 2001, the company has been active in Europe since 1990.

With an expanding team of expert data scientists and researchers, FRE focuses on a broad range of R&D and co-creation projects, pioneering innovations that address real-world challenges. We are currently looking for collaborative opportunities with forward-thinking companies that can benefit from Fujitsu's cutting-edge technologies in areas such as computing, networks, Al, data security, and converging technologies. One example is our development of pioneering <u>Social Digital Twin</u> technology, which through data driven human behaviour economics insights can help businesses to take tangible actions faster with increased certainty towards Net Positive.

If your company is interested in exploring a potential co-creation project with us, please feel free to reach out via our LinkedIn page: https://www.linkedin.com/company/fujitsuresearch



Serban Georgescu CEO, Fujitsu Research of Europe

A unique approach to innovation:

FRE is leading a new direction for agile R&D, based on identifying real-world issues that need tangible technology approaches.

This dynamic approach represents a real shift from the traditional laboratory approach of deep technology development.

Business & Innovation:

Our team aims to accelerate the commercialisation of cutting-edge technologies emerging from Fujitsu's R&D, first by working with customers across Europe to understand and meet their challenges using innovative technologies, and secondly by collaborating with innovative companies across Europe to jointly create solutions addressing customer's challenges in a fast-evolving world.



Ryouichi Yamura Innovation specialist team leader



Spotlight: Japanese corporate acquisitions in Europe

There have been several high-profile acquisitions of European companies by Japanese corporates in 2024 – highlighting the importance placed by Japanese companies on European businesses and technologies. Here are some examples:

Graphcore

Semiconductor

UK semiconductor company Graphcore, which develops accelerators for machine learning workloads, was acquired for an undisclosed amount by Softbank in July 2024

NATIF AI

Al and Automation

Natif.ai, a German software startup specialising in Al-powered image recognition and optical character recognition, was acquired by Ricoh in April 2024 as part of an ongoing expansion of its Process Automation division

Luscii

HealthTech

Dutch digital healthcare and remote patient monitoring solution provider Luscii was acquired by Omron in April 2024, following on from an initial Seed investment by the corporate in 2018 and subsequent collaboration within digital health

Transaction Name	Announced Date	Acquiree Industries	Location
Kard acquired by THK	11/10/2024	Banking, Customer Service, Financial Services, FinTech, Mobile Apps, Mobile Payments, Payments, Personal Finance, Teenagers	France
Simon Hegele Logistics and Service acquired by Nippon Express	30/09/2024	Logistics, Shipping, Supply Chain Management	Germany
Bravissimo acquired by Wacoal	26/09/2024	Fashion, Lifestyle, Retail	United Kingdom
Air Flow acquired by Modalis Therapeutics	10/09/2024	Logistics, Oil and Gas, Transportation, Warehousing	France
Calliditas Therapeutics acquired by Asahi Kasei	02/09/2024	Biotechnology, Medical Device, Pharmaceutical	Sweden
Stakelogic acquired by Sega Sammy Holdings Inc.	26/07/2024	Digital Entertainment, Gaming, Internet	The Netherlands
Graphcore acquired by SoftBank	11/07/2024	Artificial Intelligence (AI), Machine Learning, Semiconductor	United Kingdom
GHH Group acquired by Komatsu	01/07/2024	Machinery Manufacturing, Manufacturing, Mining	Germany
NorthSeafood acquired by Kyokuyo	12/06/2024	Food and Beverage, Food Processing, Packaging Services, Seafood	The Netherlands
Südkabel acquired by Sumitomo Electric Industries	06/06/2024	Electronics, Manufacturing, Sales	Germany
Salland Engineering acquired by Advantest	05/06/2024	Semiconductor	The Netherlands
BaxEnergy acquired by Yokogawa Electric Corp.	05/06/2024	Energy, Renewable Energy, Software	Italy
Multigraf acquired by DUPLO SEIKO	30/05/2024	Printing, Publishing	Switzerland
Applicos acquired by Advantest	30/05/2024	Semiconductor	The Netherlands
Eighty 8 Health & Fitness acquired by Fast Fitness Japan	30/04/2024	Fitness	The Netherlands
MA micro automation acquired by Hitachi	26/04/2024	Commercial, Industrial Automation, Machinery Manufacturing, Manufacturing	Germany
natif.ai acquired by Ricoh	22/04/2024	Artificial Intelligence (AI), Machine Learning, Software	Germany
Luscii acquired by Omron Healthcare	05/04/2024	Apps, Health Care, Software, Virtual Reality	The Netherlands
Rolan Robotics acquired by Daihen	10/03/2024	Industrial Automation, Robotics	The Netherlands
Delta acquired by Zuiko	26/02/2024	Machinery Manufacturing, Manufacturing, Product Design	Italy
Torqeedo acquired by Yamaha Motor	19/01/2024	Automotive, Electric Vehicle, Manufacturing, Transportation	Germany
Food Union Group acquired by PAG	10/01/2024	Food and Beverage, Food Delivery, Organic Food	Latvia

Source: Crunchbase data exported in December 2024. This exported data is not guaranteed to be comprehensive





Innovator Interview

Yokogawa Innovation Switzerland

Daisuke Nojima Managing Director November 2024

Please can you explain the main activities of your company?

Yokogawa Innovation Switzerland (YIS) is focused on identifying and developing new R&D focus themes for Yokogawa Group, with a specific focus on biotechnology. The core business of Yokogawa has traditionally been factory automation technologies, mainly for petrochemical and oil & gas industries, for example we provide production management systems, sensors and controllers for petrochemical customers. However, the management board has identified biotechnology as a new business opportunity.

YIS was established in 2020 to develop a new bio business through open innovation activities. We are currently focusing on biomanufacturing, including the production of microalgae-based ingredients and raw materials for food, cosmetics and pharmaceuticals. We also have technologies for cell line development within biomanufacturing as well as bioinformatics solutions. In this way we hope we can contribute to the green transition as we shift away from our petrochemical business.

Why did Yokogawa choose Europe, or more specifically Switzerland, to establish YIS?

Yokogawa is not a biotechnology company, so partnerships were always going to be essential in developing the new business. Europe is home to a thriving life sciences sector, with a strong pharma and biotech ecosystem in Switzerland, in particular in Basel, where our office is located.

The ecosystem is also a lot more concentrated within Europe compared to North America. This makes it easier to network and form connections with other players across both industry and academia. 'Switzerland Innovation Park Basel Area' is an ideal place to access this strong ecosystem, and provides Yokogawa with excellent infrastructure to help achieve our goals.

What are the main benefits a European startup can expect when working with a Japanese corporate partner?

One of the main benefits is the support the corporate can provide to help them successfully enter the Japanese market - this can be a challenge otherwise. Although it can be a complex and time-consuming process to form a partnership with a Japanese corporate, once it is in place it will usually be a long-lasting and strong relationship which can continue to bring opportunities to both sides over many years.

What are some challenges you face when trying to work with European partners?

Communication is usually the biggest challenge. This is particularly the case when members of R&D teams at the corporate are involved as they may be less confident in using foreign languages.

Japanese companies are also dependent on their annual budget schedule to be able to progress with a new initiative such a partnership. The financial year begins in April in Japan, and it is usually very difficult to finance something which has not be included in the annual budget. Therefore, it is sometimes necessary to wait until the next financial year before a collaboration can begin. This can be difficult when working with partners with a shorter timeframe in mind.



What can European startups do to make it easier to work with Japanese corporates?

Startups should be prepared for the longer timeframes involved when working with Japanese corporates. The decision-making process is often very lengthy and involves many stakeholders who need to carefully review the possible advantages of any collaboration.

It may also be the case that European or Innovation offices only have partial decision-making powers. For example, sometimes they can oversee new collaboration projects but not investments. Many startups I speak with are looking for investment first and foremost, but this is not an area I am able to make decisions about – everything must be referred back to head office and this can be time consuming and difficult to progress. It is important for startups to understand to what extent the office or business unit they are speaking with has the authority to make decisions.

When working with a Japanese corporate it can be best to start with a small-scale project before gradually building up to a larger-scale partnership once the potential benefits have been established. It can be challenging to initiate larger collaboration models such as investments without first demonstrating the value the partnership can bring to the corporate.

What piece of advice would you give to a European startup considering a new partnership with a Japanese corporate?

Most Japanese corporates do not have a clear vision in mind when they approach a potential partner as they are still building up a picture of what the options are, key trends with the chosen field, and how they might be able to add value. This means that initial interactions with the corporate can feel vague or lacking in clear purpose for the startup. However, this is all part of the relationship-building process and is a key step in helping the corporate define their focus areas. Any insights the startup can provide to the corporate are greatly appreciated and will help lay the foundation for any future engagements.

Which kinds of startups or academic partners are you looking to work with?

We are particularly seeking partnerships with partners who have technologies which can support the development of microalgae-based biomanufacturing processes. Additionally, we are also keen to hear from any other startups or organisations that are interested in working with us across another area of biotechnology.







Innovator Interview

Eisai EMEA

Peter Atkinson

Executive Director, Head of Hatfield Research Labs and UK Academic & Industry Alliances January 2025

Please tell us more about Eisai and your involvement in the European innovation ecosystem.

Eisai is a global pharmaceutical company with an interest in developing medicines, with a focus in areas such as neurology, oncology, and global health – which includes tropical diseases. We have global R&D locations in the US, the UK, and Japan. Specifically, in the UK, our research focuses on neurodegeneration, investigating diseases such as Alzheimer's and Parkinson's. This is a particularly challenging field, and it takes a lot of time to collect information, identify breakthroughs, and validate research directions. This would be impossible to do on our own, so collaboration is key for our success.

So, over the past decade, we have explored various ways to collaborate– for example working with key opinion leaders, academia, and small companies. The UK provides an excellent environment for collaborative research, and we have joined public-private partnerships, for example with Alzheimer's Research UK (Dementia Consortium), to advance our goals.

We have also had a longstanding partnership with University College London (UCL) for over a decade. This collaboration is a great example of our approach to working with academics, from generating early ideas all the way through to clinical development. One of our most advanced projects from this partnership is currently in clinical trials and doing well, which is a great achievement.

How about your company's interactions with the startup sector?

This is an area that we've certainly been exploring more in recent years. There are many great ideas that originate in academia and spin-out into startup companies, and we aim to support academics transitioning these discoveries into practical applications.

To help with this, we have been strengthening our engagement with venture capital firms, accelerators, and incubators. For example, we sponsor the Babraham Accelerator Program, which serves as a gateway into the Cambridge innovation ecosystem for us. Similarly, we support the Milner Therapeutics Consortium, also based in Cambridge. We support these initiatives in various ways ranging from engagement at a distance to more active mentorship type roles, and occasionally explore investment or collaboration opportunities in some cases.

It's worth mentioning that investment decisions are generally made by our teams in the US or Japan – but our presence in the UK provides a vital scientific scouting function for them. This also enables us to showcase the breadth and depth of scientific advancements in the UK and Europe to the broader organisation, which helps to foster more opportunities for impactful collaborations.

Is there anything particular about the UK or Europe that appeals to Eisai?

The focus of our research is strategically aligned in our global R&D team – but while the overarching goals remain the same, there are regional differences in how collaborations are executed. In the UK, for example, the collaborative environment has some specific differences and advantages.



For example, one thing that sets the UK apart is that there's great access to human biology resources and patient networks. The UK has a robust health data system that offers immense potential for scientific research, for example via initiatives like the UK Biobank. These resources enable scientists to better understand diseases at the patient level, which is crucial for Eisai, as our projects are often deeply rooted in understanding patient disease as a foundation for developing effective treatments.

The UK is also particularly open to public-private partnerships and has strong philanthropic and not-for-profit sectors. This enables multidisciplinary consortium-based approaches to address complex medical challenges, so for Eisai it's great to be able to tap into resources like this.

On the flip side, what do you think the advantages are for UK or European organisations in working with Japanese companies such as Eisai on these topics?

In my experience, one of the defining characteristic of Japanese companies is their long-term loyalty to our trusted collaborators Once a collaboration begins and a robust relationship is established, there is a very high level of commitment to fulfilling the shared objectives. Our scientists in Japan are very committed – they have a deep understanding of the areas we're working in, and remain dedicated to supporting our collaborations, which fosters strong and enduring partnerships.

In our case, having our office here in the UK is also particularly helpful to making the collaborations a success. We act as something of a conduit between collaborators in Europe and our teams in Japan, helping to bridge some of the cultural and language differences that might otherwise pose challenges.

What are the benefits for Eisai in working with startups?

Our focus is on technologies and therapeutic approaches that complement our internal research, and we're really witnessing a massive technological revolution, especially in the realm of enabling technologies. Things like AI and health tech devices are areas that extend beyond our traditional ways of working, and we recognise that we can't be completely on our own in creating or working on inventions in these areas.

So, we see a need to partner with entrepreneurial startups around their next generation tech. Sometimes, these collaborations help us understand new fields, while in other cases, they lead to joint development efforts.

Startups often have great ideas but may lack the resources, experience, or pathways to transform those ideas into practical applications, so collaboration can be a win-win for both parties, with reciprocal benefits for both.

Do you have any other final comments for us?

One topical discussion point for now and the future is the growing importance of AI, where there's a real buzz at the moment. In life sciences it's going to be transformational, and particularly in R&D we're seeing a lot of promise for improving efficiencies and accelerating the pace of innovation, particularly speeding up the process of identifying new medicines. I think the UK and Europe is well-positioned to play an important role in advancing this field, so it's an area that we're following closely.



Japanese Companies in This Report: Innovation Outposts

To understand Japan's corporate push towards innovation in Europe in more detail, we have interviewed 64 Japanese companies with an innovation-focused presence in the European market. These innovation 'outposts' typically take four different forms, each with a different focus, depth, and time in market.



The first, and most common, approach is the 'Innovation Hub' – a relatively lean operation housing a small team of up to 10 people. These offices usually represent a corporate's first foray into a new market and are often tasked with roles such as technology scouting or new trend analysis.



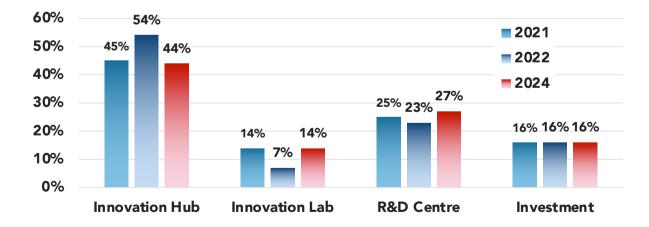
The second category is what we refer to as an 'Innovation Lab' – typically a slightly larger and more established presence than an Innovation Hub, usually with a medium-sized team of 10-30 people. These Innovation Labs often have a more direct role in running innovation-related activities, such as Proof of Concept trials, or local incubator or startup accelerator projects, directly here in Europe. Although this category is comparatively smaller, we're seeing an increase in companies looking to scale up their operations in Europe to this level in the coming years.



Next up, we have the 'R&D Centre' – usually a highly-established presence, with a focus on research and development. R&D Centres often have closer ties with universities or large European industry partners, and much larger teams.



Finally, we have offices with an 'Investment', or 'CVC' (Corporate Venture Capital) focus, which is a different kind of innovation focus to the above three categories. As Japanese corporates seek to ramp up their investment activities into European startups, having a close on-the-ground presence, near to startups of interest, is invaluable to investors to help them make the best investment decisions.



Based on our recent interviews, the breakdown of types of 'innovation offices' set up by Japanese corporates can be seen as above. Although we have seen an increase in the number of companies with an innovation-focused office in Europe compared to previous reports (64 respondents in 2024 vs 59 in 2022), innovation hubs remain the most popular type of office for Japanese companies.

Naturally, companies with newer innovation offices appear to prefer this lean approach – with nine of the 12 companies that opened their office after 2022 (75%) taking this approach.