ICF Quarterly Report July to September 2025

Activity Report (July-September)

1. Interim Meeting

ICF Autumn Forum 2025 (September 17)

The ICF Autumn Forum 2025 was held on September 17 in a hybrid format with a total of approximately 100 participants.

Report on societal issue research

The Forum included an introduction of the *Listings of Societal Issues 2025*, published in March 2025, as well as an overview of discussions conducted during the first half of the FY2025 as a part of the Societal Issue Discussion series (p.2). Based on the outcomes of these discussions, ICF will launch a new initiative—On-Site Societal Issue Discussions—in the second half of the year. This initiative will offer three types of programs to meet the diverse needs of ICF members:

- Knowledge-based sessions: providing academic and conceptual understanding of societal issues
- Analytical sessions: exploring issues in greater depth
- Practical sessions: focusing on business creation and application

Activity plan for the second half of FY2025

ICF also shared the activity plans of each topic for the second half of the year at the forum. Topic and content:

- Empowerment of women:
 Support for balancing career development and life events
- Doctorate talent utilization:
 Facilitate connections between industry and PhD professionals

- Voluntary return of driver's license:
 Develop and ensure safe and convenient transportation systems for the elderly
- Robotics Study Group:
 Utilize robotics to address labor shortages
 and create new markets
- Nuclear Fusion Industry Study Group: Conduct study sessions toward the industrialization of nuclear fusion
- Deep Tech Acceleration Program: Start-up applications scheduled to begin in April 2026
- Japan CDR Coalition:
 Promote discussions to accelerate carbon dioxide removal (CDR) and realize a decarbonized society

ICF Member Pitch Session

New ICF members pitched their innovative initiatives. For example, the pitch from one startup featured activities for tackling environmental challenges through the integration of Al and physical simulation, and another highlighted the introduction of new Albased systems designed to address issues in regional public transportation. Other notable presentations featured initiatives using the metaverse to support children who do not attend school as well as efforts to combat social isolation and loneliness through community-based programs that foster broad and casual connections through shared meals.

For more details, please visit the ICF website for the upcoming event report and archived video.



Networking session at ICF Autumn Forum 2025

2. Societal Issues Research

Societal Issue Discussions

From June to July, ICF held Societal Issue Discussions based on the seven focus areas outlined in the *Listings of Societal Issues 2025*: Energy and Environment, Food and Agriculture, Mobility, Resilience, Wellness, Education and Human Resource Development, and DE&I. Participants offered various opinions and proposals, such as the following.

Focus area (event date) Opinions and proposals

DE&I (June 26)

- Promotion of multicultural coexistence
- Enhancement of transparency in talent evaluation

Education and Human Resource Development (June 26)

- Development of educational programs with a focus on community building in collaboration with startups
- Exploring potential to match doctorate talent with environmental businesses

Energy and Environment (June 27)

- Promotion of carbon credit utilization
- Re-evaluation of pumped-storage hydroelectric technology
- Necessity of providing small-scale experimental sites

Mobility (June 27)

- Addressing wrong-way driving on highways
- Securing transportation options for elderly residents in rural areas
- Utilization of autonomous driving technologies
- Strengthening measures against drunk driving

Food and Agriculture (July 3)

- Introduction of indicators to quantify biodiversity levels
- Importance of education to reduce food loss

Resilience (July 3)

- Strengthening disaster prevention education
- Fostering a sense of urgency toward disasters using VR
- Risk management of underground infrastructure

Wellness (July 4)

- · Addressing the health issues of children
- · Countermeasures for social media addiction
- Prevention and management of lifestylerelated diseases
- Exploring new market opportunities for longterm care food

Based on the opinions raised in recent discussions, ICF will organize study sessions and seminars aimed at further exploring societal issues. It will also start initiatives to refine and enhance business ideas. For example, in resilience, ICF is planning study sessions focused on disaster response, including education and the utilization of volunteers. In food and agriculture, ICF aims to hold seminars centered on biodiversity assessment. ICF also plans to further explore concrete initiatives for leveraging doctorate talent and bridging talent and opportunities in environmental business.

Event report (in Japanese):

https://icf.mri.co.jp/research/research-24021/

Introduction of On-site Societal Issue Discussion

ICF will launch On-Site Societal Issue Discussions as a new initiative. Discussions will be conducted on the premises of member companies and organizations. Based on the *Listings of Societal Issues*, ICF can offer a variety of program formats tailored to the needs and interests of members, including seminarstyle sessions, in-depth exploration of specific issues, and formats focused on business creation.

Please feel free to contact us if you are interested!

Download of LSI available from members-only page

Starting July 9, the *Listings of Societal Issues* 2025 (Japanese version) became available for download on the members-only website. No additional application is required.

ICF Members Website:

Login: https://icf.mri.co.jp/limited/

If you have forgotten your login information for the members website, please contact us via the inquiry form.

ID and password inquiry form for ICF Members Website

https://mri.smartseminar.jp/public/application/add/8862

3. Societal Implementation Research

Public Affairs: Seminar and publication of *Public Affairs Guidance* (Basic Edition) (July 17)

Last fiscal year, ICF focused on public affairs (PA) as part of its societal implementation research, holding seminars and workshops on the topic. It has compiled the results of these activities into the *Public Affairs Guidebook* (Basic Edition) and published it online.

The following page offers more details in Japanese:

https://icf.mri.co.jp/activities/activities-24377/

On July 17, ICF hosted a seminar that provided an in-depth analysis of *the Basic Policy on Economic and Fiscal Management and Reform 2025*, released in June, as a case study to highlight key national policy trends, an awareness of which is essential for conducting PA activities.

The event report and archived video (members only) are available below.

Event report (in Japanese):

https://icf.mri.co.jp/activities/activities-23916/

Archived video (in Japanese):

https://icf.mri.co.jp/limited/research/research-23907/

4. Business Co-creation activities

Robotics Study Group #2: A future society envisioned by technology pioneers (July 30-31)

The ICF Robotics Study Group held its second event over two days (July 30–31) and showcased a future society as envisioned by university-based startups and other innovators.

On the first day of the event, Hiroaki Kuwahara from Toyohashi City in Aichi Prefecture and Teruyuki Kobayashi from Kisui Co. Ltd. presented on the potential of robotics to address labor shortages in agriculture and the importance of building an ecosystem that includes the participation of local government and startups. Participants emphasized the importance of gathering on-site feedback over the long term and incorporating specific needs—for example, adjusting a robot's height by just a few centimeters to enable its adoption—into the design of ecosystems. They also highlighted that, in addition to Al and data utilization, hardware development is essential and that robots can contribute not only to operational efficiency but also to improved profitability and management performance.

On the second day, Yoshiyasu Ando from iROBOTICS, Inc. and Shuichi Ishida from TriOrb Inc. shared case studies on the use of drones and omnidirectional mobile robots in facility management. They explained how these technologies can enable safe and efficient operations beyond on-site constraints. They also demonstrated the potential of combining different technologies to solve complex challenges. Discussions highlighted how integrating multiple robotic technologies is effective in addressing problems, how gradual implementation considering field needs and safety is crucial, and how omnidirectional mobility and collaborative transport technologies are expected to enhance both operational efficiency and safety on site.

The event report and archived video (members only) are available from the following (in Japanese).

Day 1: https://icf.mri.co.jp/activities/activities-24132/

Day 2: https://icf.mri.co.jp/activities/activities-24137/

Robotics Study Group #3: From cutting-edge robotics research to Social Implementation (September 24)

On September 24, the third event of the Robotics Research Group was held at Institute of Science Tokyo. The participants first visited the laboratories of Professor Shingo Maeda and Professor Hiroyuki Nabae in the College of Engineering. Both professors are conducting cutting-edge research on soft robotics, a leading area within deep-tech robotics. Following the tour, Professor Maeda provided an overview of the latest developments in robotics research, its societal implementation, and its potential to address broader societal challenges.

In addition, Kawasaki Heavy Industries, Ltd., also shared case studies on advanced robotics, their real-world application, and approaches to co-creation based on robot platforms.

Mitsubishi Research Institute also introduced its independent research project on AI robotics, highlighting methods to accelerate the uptake of service robots in society and proposing strategies for Japan to gain a competitive edge.

The event provided participants with a rare opportunity to hear directly from researchers and learn about practical examples of the societal implementation of soft robots, often considered experimental rather than market ready. Soft robots have a wide range of potential applications; for example, they can help in caregiving tasks such as fecal extraction. Discussion covered topics from data management methods for Al robot learning and control, proposed by Kawasaki Heavy Industries, to platform interoperability, and the role of

service providers, a new kind stakeholder for the field with the potential to brings an understand of the needs and challenges of diverse industries and that is capable of manufacturing, deploying, and operating service robots.

Exploring the future society shaped by physical technology at Expo

ICF's activities incorporate technological perspective to achieve societal implementation and business development. Its initiatives explore how cutting-edge technologies can be leveraged to address societal issues.

Members have been particularly impressed by not just digital technologies, but physical technologies acting directly in the real world.

ICF published a two-part article (in Japanese) highlighting these innovations, their impact at Expo 2025, and the future society that they could help shape.

Part 1: Exploring the current state of physical technology at Expo 2025 https://icf.mri.co.jp/information/information-24434

Part 2: The impact of showcasing physical technology at Expo 2025 https://icf.mri.co.jp/information/information-24447

5. Seminars

Acaric Co., Ltd. and Mitsubishi Research Institute co-hosted seminar:

Promoting the Active Engagement of Doctorate Talent in the Private Sector (September 18, September 25, and October 2)

Acaric Co., Ltd. and Mitsubishi Research Institute (MRI) organized and hosted a series of three seminars on how to understand, identify, and utilize doctorate-level human resources. The series came off the heels of MRI's work for the Ministry of Education, Culture, Sports, Science and Technology in creating the

Guidelines for Promoting the Active
Engagement of PhD Talent in the Private Sector.
Acaric served on a panel of experts while
creating the guidelines. A total of 280
participants took part over the course of the
seminar series and gave it favorable review.

Each session generated lively discussion and numerous questions from the participants. In Session 1, participants asked how companies could help newly hired PhD graduates develop a strong business mindset. In Session 2, questions centered on how doctorate-level employees are evaluated after joining the workforce. In Session 3, discussions focused on the significance and potential benefits of hiring doctorate talent in small and medium-sized enterprises. Overall, the series successfully fostered deeper understanding of the value and practical utilization of doctorate talent in corporate settings.

Ninth session of ICF Online Discussion: Exploring the Commercialization of healthcare (July 29)

In recent years, a growing number of companies from diverse industries have entered the healthcare market. The event examined case studies from Mitsubishi Research Institute and featured a special talk by Tatsuro Amano and Tomoya Okado, both serving as President of the Healthcare Innovation Association. The pair shared insights on emerging industry trends and new business developments in the healthcare market.

At ¥77 trillion, the healthcare market is substantial and involves a wide range of stakeholders. Business opportunities are emerging in areas such as preventive and dementia care, mental health support, and preconception care. At the same time, regulatory compliance under the Pharmaceuticals and Medical Devices Act, as well as the need to build robust evidence, have been identified as significant challenges.

For more details, please refer to the event report and archived video (members only).

Event report (in Japanese)
https://icf.mri.co.jp/activities/activities-24645/
Archived video (in Japanese):
https://icf.mri.co.jp/limited/field-24656/

Tenth session of ICF Online Discussion: Exploring the upcoming challenges and solutions for promoting the empowerment of women (September 25)

Efforts to promote the active participation of women in the workplace have made steady progress, with systems supporting balance between work, childcare, and caregiving now well established. However, many women in the workplace continue to face challenges, including the heavy burden on time of juggling multiple roles and the psychological strain caused by persistent unconscious bias and microaggression.

To explore these issues, ICF welcomed Akiko Sueyoshi and Yurie Shiraishi from NTT DATA Japan Corporation. They introduced the company's advanced DE&I initiatives, along with the Real Working Mothers Community—a mutual support network that originated from voluntary efforts among women working at the company. The session included a discussion on the unique strengths and potential of such voluntary, non-mandatory, and unofficial communities within organizations.

The event report and archived video will be made available on the ICF website at a later date.

A Future Society Connected by Data: Linking Healthcare, Business, and Citizens (September 30)

In recent years, various forms of data—from genomic information to electronic health records (EHR), personal health records (PHR), communication technology, and cloud infrastructure—have been reshaping both society and the healthcare industry. On September 30, ICF held a discussion on how to

effectively collect and leverage such data within society. The session explored the multifaceted ways in which data can be harnessed and envisioned future scenarios where data would drive innovation from industry to everyday life.

The event was co-hosted with the Healthcare Innovation Association, an ICF member organization, and took place at CIC Tokyo Venture Café—an innovation hub that fosters collaboration among stakeholders from startups to major corporations. The open and interactive setting allowed for active engagement among participants from the broader innovation community.

Program:

- Opening "Introduction to the Listings of Societal Issue and Event Background" by Shintaro Yamaki (Mitsubishi Research Institute, Inc.)
- Introductory Talk: "The Future of Healthcare and Industry Amid a Data-Driven Society" by Tatsuro Amano (Healthcare Innovation Association)
- Panel Discussion: "How to Collect and Utilize Data: From healthcare to Society" with six panelists
 - > Tomohiro Sonoo (TXP Medical Co., Ltd.)
 - ➤ Kunihiro Nishimura (Xcoo, Inc.)
 - Yoichi Sakurai (NTT DOCOMO BUSINESS, Inc.)
 - ➤ Tatsuro Amano (Healthcare Innovation Association)
 - > Tomoya Osumi (Healthcare Innovation Association)
 - Yuka Ikeda (Mitsubishi Research Institute, Inc.)
- · Q&A session
- Closing
- Networking

The panelists emphasized the importance of ensuring mutual benefits among stakeholders involved in data collection and discussed how sharing concrete examples of data utilization can encourage broader participation in datagathering initiatives. A networking event closed the day out, with lively discussion continuing well beyond the scheduled time.

Building on the momentum from this first event, a second session is being planned to explore pathways for translating discussions into business opportunities. The upcoming event will focus on topics such as developing new revenue models and formulating market expansion strategies through the integration of diverse datasets.

A detailed event report will soon be available on the ICF website.



Panel discussion of the event

Inaugural general assembly and commemorative event of the Japan CDR Coalition (September 11)

On 11 September 2025, the Japan CDR Coalition held its inaugural general assembly and a commemorative event at Mitsubishi Corporation headquarters in Tokyo.

The Coalition now has 61 members — including 6 promoter members, and 55 general members — all committed to advancing carbon dioxide removal and fostering the development of a carbon-credit market in Japan.

The event gathered 130 participants on-site and 80 online. Tadashi Sawamura from Mitsubishi Corporation, serving as the Chair of the Promotion Committee, kicked off the event with an opening address. Greetings from by Juntaro Shimizu from the Ministry of Economy, Trade and Industry and Sei Kato from the Ministry of the Environment followed suit.

In addition, Mitsubishi Research Institute

provided insights on current trends in CDR credits, followed by a dialogue session with Spencer Low from Google and Genevieve Ding from JPMorgan Chase discussing the role of CDR in sustainability strategies and perspectives from off-takers. This was followed by a panel discussion among promoter members on accelerating initiatives in CDR.

The Japan CDR Coalition will continue accelerating efforts toward the societal implementation and market development of CDR. Comments and suggestions are welcome! Follow the Japan CDR Coalition on LinkedIn for details on future events: https://www.linkedin.com/company/japan-cdr-coalition/posts/?feedView=all

New ICF members

16 organizations joined ICF between July and September.

As of the end of September, the total number of ICF members was 632.

Activities from October and onward

Nuclear Fusion Study Group #1 (December 12)

The Nuclear Fusion Industry Study Group will hold a study session focused on fusion energy, a topic that has recently regained significant attention. This event will explore the latest trends and ongoing projects in the field.

The first session will feature an overview of the Fusion Energy White Paper issued by the Japan Fusion Energy Council (J-Fusion) in June 2025, along with updates on the fusion industry provided by Mitsubishi Research Institute. The second session will examine projects led by domestic stakeholders such as ITER, FAST, and

Helix, exploring the current state of technological development.

This study group is designed to broaden participation in the nuclear fusion industry, including individuals who have not previously been involved in fusion research. Anyone interested is welcome to participate!

Further details will be provided at a later date.



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