

MESSAGE FROM THE DIRECTOR

This year's Annual Symposium is being jointly organized by our Energy Analysis and CO₂ Storage Divisions. Our focus this year is to underpin the future low-carbon energy transition through a combination of renewable energy deployment, socio-technical regime understanding, and utilization of carbon capture and storage (CCS). One of the major objectives of our Institute is to realize a low-carbon future, and to help Japan achieve a reduction in CO₂ emissions of 70% compared to 1990 levels by the year 2050. In order to achieve this reduction, we need to be cognizant of energy generation and industrial sectors, and the potential of CCS to reduce emissions. In addition, the effective deployment of a range of renewable energy technologies, both centralized and distributed, needs to be addressed while considering government, industry and householders. This year's symposium will focus on energy transitions in terms of the emergence of a new energy regime, while also considering the timeline for this transition and the need for complementary emission reducing technologies such as CCS.

In particular, this year we wish to assess our research efforts toward the realization of energy transitions, consider the need for complementary technologies, and discuss potential future pathways and scenarios that enable a successful energy transition to occur.

Through our discussion and debate, we aim to further focus the contributions of I²CNER's research portfolio to the low-carbon energy transition, specifically regarding the energy technologies we are aiming to enable, alongside the carbon reducing approach of CCS.

I would like to take this opportunity to express, on behalf of all faculty, researchers, and administrative staff of I²CNER, our sincere appreciation to all who have supported the Institute and contributed to its progress. It is my great hope that we engage each other in active discourse, find and establish new research connections, and leave with renewed excitement, motivation, and appreciation for scientific discovery toward our common goal of a carbon-neutral energy society.



Petros Sofronis
Director, I²CNER