
IERE 4th Webinar: Towards a Carbon Neutral Energy Future

18 November 2021

Synopsis

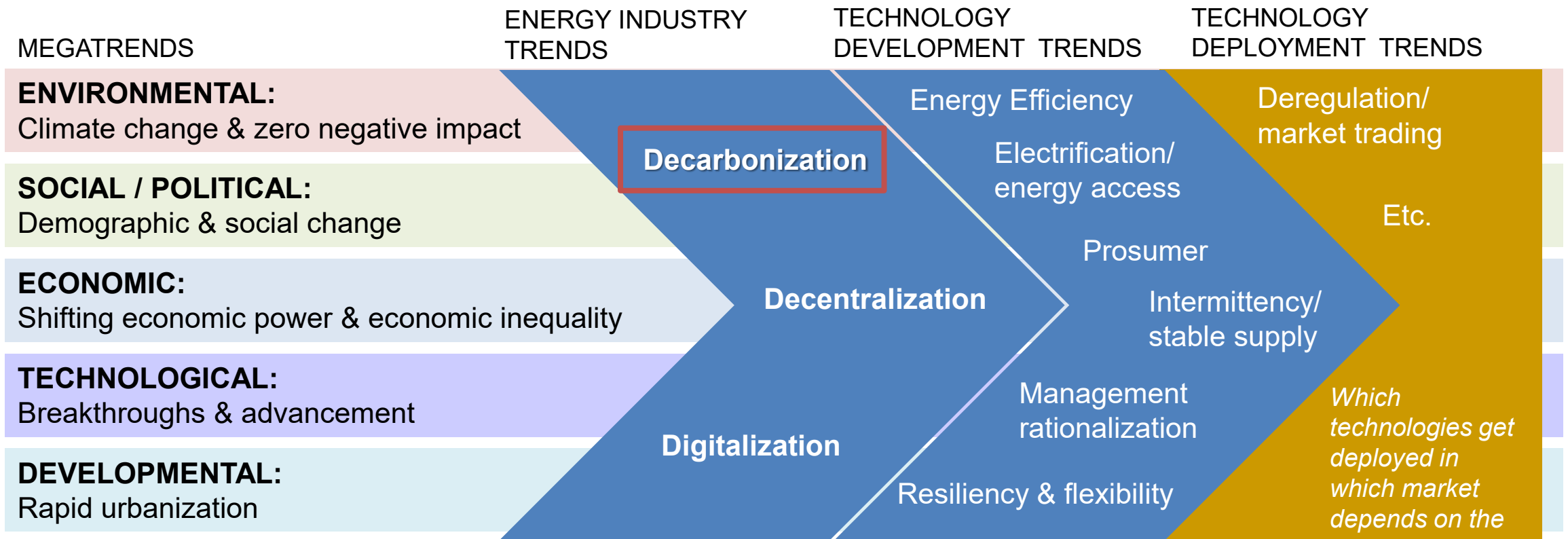
The carbon neutral energy future is our ultimate goal, but our transition still remains challenging. Most of the countries across the world are stepping up their efforts to tackle it.

In this webinar, four IERE members from each region (France, USA, Australia and Japan) will present the path to achieving carbon neutrality in their respective countries/regions from various aspects of technology, economics, policy, strategy, etc.

Agenda

Time	Item	Speaker/Moderator
11:00–11:05 (UTC)	Opening: About IERE webinar	<i>Dr. Takao Watanabe IERE Secretary General</i>
11:05–11:10 (UTC)	Introduction to 4 th webinar	<i>Dr. Jeanne Ng IERE Chair, Moderator</i>
11:10–11:30 (UTC)	Loving the Alien: CO2 deserves our affection but save a seat for some other surprising climate change allies	<i>Dr. Jan Mertens Chief Science Officer, ENGIE, France</i>
11:30–11:50 (UTC)	Decreasing the Cost and Risk of Decarbonization Pathways through Technology Development	<i>Dr. Timothy Allison Director, Machinery Department, Mechanical Engineering Division, SwRI, USA</i>
11:50–12:00 (UTC)	Questions & Answers	<i>Dr. Jeanne Ng to moderate</i>
12:00–12:20 (UTC)	R&D supporting Australia's energy transition	<i>Dr. Daniel Roberts Research Program Director, CSIRO, Australia</i>
12:20–12:40 (UTC)	The Challenge to Carbon Neutrality in 2050 -Issues for Japan and CRIEPI's Undertaking-	<i>Dr. Koji Nagano Associate Vice President, Planning Group, CRIEPI, Japan</i>
12:40–12:55 (UTC)	Questions & Answers	<i>Dr. Jeanne Ng to moderate</i>
12:55–13:00 (UTC)	Closing	<i>Dr. Takao Watanabe IERE Secretary General</i>

From Megatrends to Technological Trends



Source: Adapted from PWC's Megatrends, PWC
(<https://www.pwc.nl/en/topics/megatrends.html>)

Source: World Energy Council

Source: Technology Foresight 2021, IERE

Climate change pressure from global policy...

COP26: Together for our planet



Delegates just prior to adoption of the Glasgow Climate Pact. Credit: UN News/Laura Quiñones.

Day 13: An agreement to build on

[Source: COP26: Together for our planet | United Nations](#)

...to local regulatory disclosure requirements

TCFD

TASK FORCE ON
CLIMATE-RELATED
FINANCIAL
DISCLOSURES



Governance

Disclose the organization's governance around climate-related risks and opportunities.

Recommended Disclosures

- a) Describe the board's oversight of climate-related risks and opportunities.
- b) Describe management's role in assessing and managing climate-related risks and opportunities.

Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.

Recommended Disclosures

- a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.
- b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.
- c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

Risk Management

Disclose how the organization identifies, assesses, and manages climate-related risks.

Recommended Disclosures

- a) Describe the organization's processes for identifying and assessing climate-related risks.
- b) Describe the organization's processes for managing climate-related risks.
- c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

Metrics and Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

Recommended Disclosures

- a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
- b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
- c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

Source: Recommendations | Task Force on Climate-Related Financial Disclosures (fsb-tcfd.org)

THANK YOU