

German Japanese Energy Transition Council

### **GJETC Retrospect 2016 – 2022**

### **GJET**

#### **GJETC** at a Glance

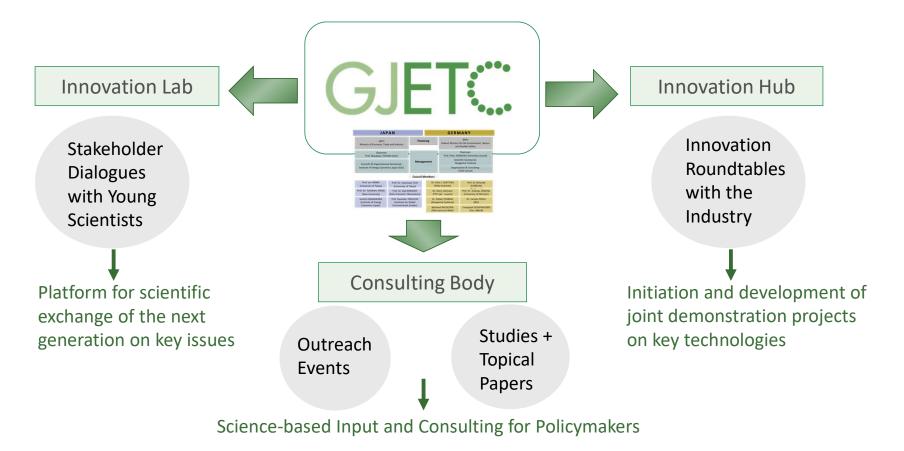
#### A Role Model for International Cooperation on Climate and Environmental Issues since 2016



Council Meeting in Tokyo, 2016

March 2023

#### **Concept and Functions**



March 2023

#### **Council Structure**

JAPAN				GERMANY		
METI Ministry of Economy, Trade and Industry		Financing			BMWK Federal Ministry for Economic Affairs and Climate Action	
Co-Chair:					Dr. Stefan THO	Co-Chair: MAS (Wuppertal Institute)
Prof. Tatsuya TERAZAWA (IEEJ)		Management			Scientific Secretariat: Wuppertal Institute	
Scientific & Organizational Secretariat: Institute of Energy Economics Japan (IEEJ)					Organization & Consulting: ECOS Consult	
					Principal Advisor: Prof. Peter HENNICKE	
		Council	Members			
Prof. Jun ARIMA	Prof. Yasumasa	a FUJII			in GOLDAMMER emoine Institute)	Dr. Harry LEHMANN (PTX Lab – Lusatia
(University of Tokyo)	(University of Tokyo)				ndreas LOESCHEL	Dr. Felix C. MATTHES
Prof. Dr. Toshiharu IKAGA	Prof. Makoto NIREI		(Bo	(Bochum University)		(Oeko Institute)
(Keio University)	(University of Tokyo)			Manfred RAUSCHEN (Ökozentrum NRW)		Dr. Carsten ROLLE (BDI Fed. of German Ind.)
Junichi OGASAWARA (Institute of Energy Economics Japan)	Prof. Yasuo TAKAHASHI (Institute for Global Environmental Studies)		Prof. N	Prof. Miranda SCHREURS (Techn. Univ. of Munich)		

March 2023



#### **Principles of the GJETC**

- Bi-national council consisting of scientific experts
- Strategic issues and in-depth research through bilateral study groups, supported by Stakeholder Dialogues
- Enabling even controversial debates on a continuously built basis of trust
- Effective Outcomes: Council Reports, Key Recommendations and Outreach Events
- Administrative and technical support through organizational and scientific secretariats
- Co-financed by German and Japan side





## 1<sup>st</sup> Phase

2016 - 2018

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### 1st Phase (2016 – 2018): Studies & Publications

- Inauguration of the unique format of bilateral research cooperation in Sep 2016
- Studies:
  - Comparative analysis of long-term scenarios
  - Socio-cultural aspects of the energy transition
  - New Allocation of Roles and Business Segments of Established and new Participants in the Energy Sector Currently and Within a Future Electricity Market Design
  - Energy end-use efficiency: potentials and policies and the development of energy service markets Germany and Japan
- Further Publications:
  - 'GJETC report 2018'
  - Topical Paper: The G20 states selected official energy and climate targets: Renewable Energy, Energy Efficiency, CO2/GHG emissions
  - Supporting and hindering framework conditions for decentralized actors Overview on status and perspectives in Japan and Germany







INTENSIFIED GERMAN-JAPANESE COOPERATION IN ENERGY RESEARCH

Key Results and Policy Recommendations

March 2023



### 1<sup>st</sup> Phase (2016 – 2018): Council Meetings

Oct 2016	Tokyo	1 <sup>st</sup> Council Meeting	
Jan 2017	Berlin	2 <sup>nd</sup> Council Meeting	
Sep 2017	Tokyo	3 <sup>rd</sup> Council Meeting	
Feb 2018	Berlin	4 <sup>th</sup> Council Meeting	
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### 1<sup>st</sup> Phase (2016 – 2018): Events [1]

GJETC	
Haus derThe Energy Transition in Japan &FebBundespresse-Germany: Consensus and2018konferenz,Controversies.BerlinInsights of the GJETC	
MarPaul-Löbe-Haus,Public expert discussion of the Committee forMarPaul-Löbe-Haus,the Environment, Nature Conservation and2018BerlinNuclear Safety on the 7th anniversary of the Fukushima nuclear disaster.	AND IN THE REAL AND INTERVAL. AND IN THE REAL AND INTERVAL. AND INTERVA

### 1<sup>st</sup> Phase (2016 – 2018): Events [2]

Press and Visitor Center of the Apr 2018 German

Outreach: The Importance of International Cooperation under **Disruptive Changes: Recommendations** & Lessons Learnt from a Fruitful Government, Berlin German-Japanese Dialogue on the **Energy Transition** 

### GJET



Institute of Energy Sep Economics Japan, 2018 Tokyo

Outreach: The Importance of International Cooperation under **Disruptive Changes: Recommendations** & Lessons Learnt from a Fruitful German-Japanese Dialogue on the **Energy Transition** 



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# 2<sup>nd</sup> Phase

2018 - 2020

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#### 2<sup>nd</sup> Phase (2018 – 2020): Studies & Publications

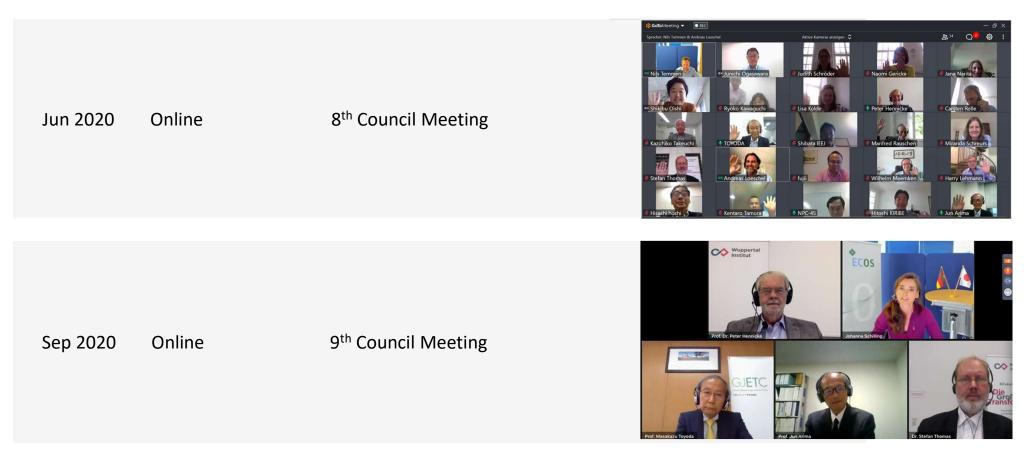
- Studies:
  - Hydrogen Society (Part 1): The role of clean hydrogen in the future energy systems of Japan and Germany
  - Hydrogen Society (Part 2): Important Aspects of Production, International Cooperation and Certification
  - Digitalization and the Energy Transition (Part 1): Virtual Power Plants and Blockchain
  - Digitalization and the Energy Transition (Part 2): P2P Electricity Trading and PPAs
- Further Publications:
  - 'GJETC report 2020'
  - Output Paper: Energy efficiency in buildings
  - Output Paper: Transportation and sector coupling
  - Output Paper: Integration cost of VRE

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### 2<sup>nd</sup> Phase (2018 – 2020): Council Meetings [1]

	Nov 2018	Токуо	5 <sup>th</sup> Council Meeting	
	Mar 2019	Berlin	6 <sup>th</sup> Council Meeting	
	Sep 2019	Токуо	7 <sup>th</sup> Council Meeting	
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### 2<sup>nd</sup> Phase (2018 – 2020): Council Meetings [2]



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#### 2<sup>nd</sup> Phase (2018 – 2020): Events

Jun 2019	Tokyo	Political Roundtable: "Intensifying the cooperation on the energy transition" (with Secretary of State Andreas Feicht, BMWi)

Dell'Attent Device date la l

Jun 2019 Tokyo

JSPS (Japanese Society for the Promotion of Science) Alumni Club Association (JACA) Award for Co-Chair Peter Hennicke



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#### 2<sup>nd</sup> Phase (2018 – 2020): Events

Sep 2019 Tokyo

Outreach: "Management Options for Unbundled & Secure Electricity Markets with Growing Shares of Renewable Energy Needs, Experiences and Options for Japanese-German cooperation"



Jul 2020

Online

Outreach: "Key results, lessons learnt and perspectives of the German-Japanese Energy Transition Council"





# 3<sup>rd</sup> Phase

2020 - 2022

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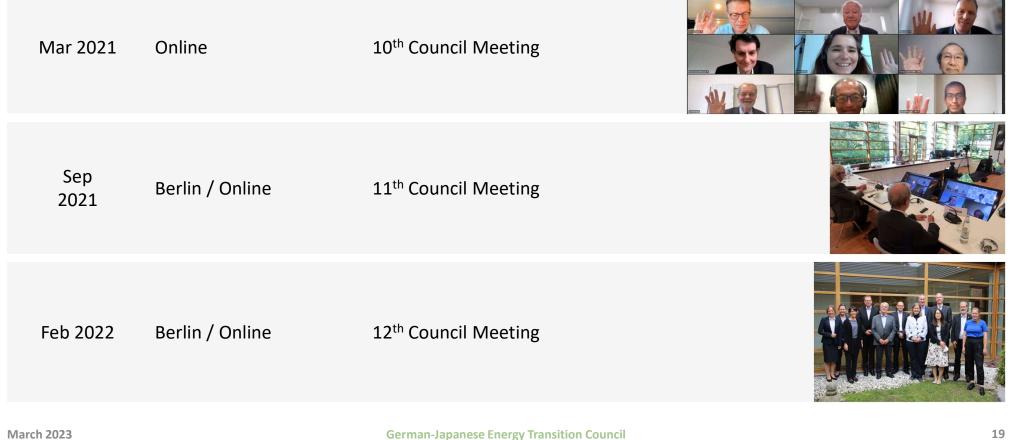
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### 3<sup>rd</sup> Phase (2020 – 2022): Studies & Publications

- Studies:
  - Energy and Climate Policy in the Post Covid-19 era Comparative Analyses on Germany and Japan
  - Digitalization and the Energy Transition: Use of Digitalization to Optimize Grid Operation Utilizing AI and Big Data collected from DERs
  - CCUS and Hydrogen Contributing to Decarbonization of Energy Intensive Industries
  - The Role of Batteries Towards Carbon Neutrality: How can Distributed Electricity Storage Contribute to Balancing Supply and Demand in Power Markets as well as in Power Grids?
  - Key Strategies Towards Decarbonization of Energy Use and Supply in Japan and Germany: Insights from a Comparison Study on Long-Term Scenario Analyses up to 2050
  - Potential Roadmaps for Decarbonization of the Steel Sector
- Further Publications:
  - Analysis: Potential Technology and Business Fields of Mutual Interest for German and Japanese Companies



### 3<sup>rd</sup> Phase (2020 – 2022): Council Meetings



### 3<sup>rd</sup> Phase (2020 – 2022): Events

## GJET C

Jul 2021	Online	Outreach: "Beyond Climate Emergency – Steps Towards Carbon Neutrality, German- Japanese Study Results on Key Questions"	
Sep 2021	Berlin	Award of the Japanese Government for Co-Chair Peter Hennicke	
Nov 2021	Online	Outreach: "Heading for carbon neutrality: Key strategies for Germany and Japan"	
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#### 3<sup>rd</sup> Phase (2020 – 2022): Events



Sep 2021	. Online	Stakeholder dialogue with Young Scientists: "Increasing the Ambition Level of Climate Mitigation – New Challenges and Opportunities for International Cooperation on the Energy Transition"	
Nov 2021	Online	Innovation Roundtable: "Thermoelectric Generators (TEG) for Waste Heat Usage in the Industry: Technologies, Applications, Future Challenges"	
May 2022	Online	G-J Workshop on G7 Summit	
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# 4<sup>th</sup> Phase

2020 - Now

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### 4<sup>th</sup> Phase (2022 – now): Studies & Publications

- Studies:
  - "Strategies, Concepts and Measures for Decarbonising the Building Stock by 2045/50"
  - "Pathways to CHG Neutrality for the Petrochemical / Chemical Sector"
- Publications:
  - "Potentials for Waste Heat Usage in Japan and Germany"

### 2<sup>nd</sup> Phase (2018 – 2020): Events

Nov 2022 Berlin / Online

/ Online 1

13<sup>th</sup> Council Meeting

Mar 2023

Tokyo

14<sup>th</sup> Council Meeting



GJET C



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#### 3<sup>rd</sup> Phase (2020 – 2022): Events



Nov 2022	Online	"Approaching Carbon Neutrality in Times of Crisis: German-Japanese Study Results on Role of Decentralized Electricity Storage, Decarbonization of the Steel Industry and Long-Term Scenarios"	the United States of the State
Dec 2022	Online	"Connecting the Outcome of COP 27 with German-Japanese Cooperation on the Energy Transition"	S ADARS
March 2023	Tokyo/online	Stakeholder Dialogue with the industry	



For further information please visit gietc.org

### Thank you for your attention