



Under the auspices of:

Organized by:



Heading Toward The IGRC 2020

Hisataka Yakabe

**Vice Chairman of
Research & Development & Innovation Committee of IGU**

Overview

● *Summary of IGRC2017*

- Number of Papers and Participants
- Conference topics

● *IGU work (Korean presidency)*

- Results of survey by the Korean Presidency Team
- Main theme and strategy in the next triennium

● *Vision for next IGRC2020*

- How to build the next plan of R&D&I committee
- Subject for the next IGRC

Overview

● *Summary of IGRC2017*

- **Number of Papers and Participants**
- **Conference topics**

● *IGU work (Korean presidency)*

- **Results of survey by the Korean Presidency Team**
- **Main theme and strategy in the next triennium**

● *Vision for next IGRC2020*

- **How to build the next plan of R&D&I committee**
- **Subject for the next IGRC**

Main Theme in IGRC2017

**“Natural Gas:
Catalyzing the Future”**

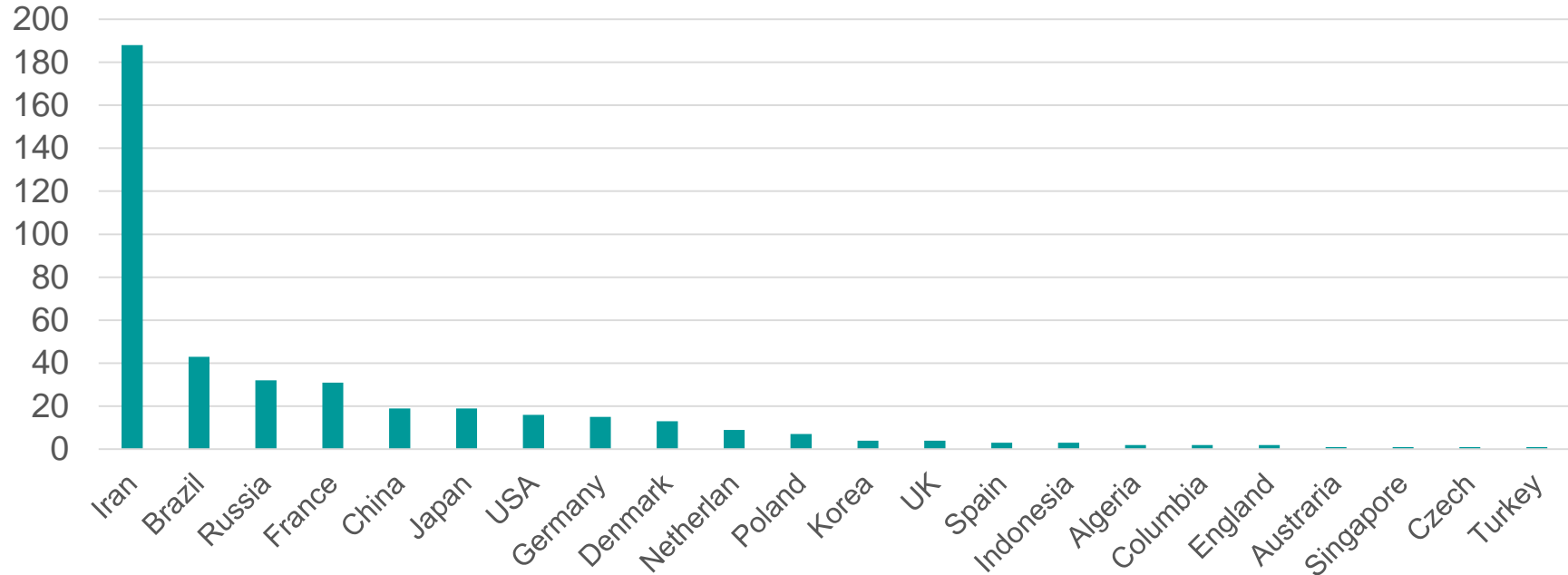
Comparison between the previous and current conference data



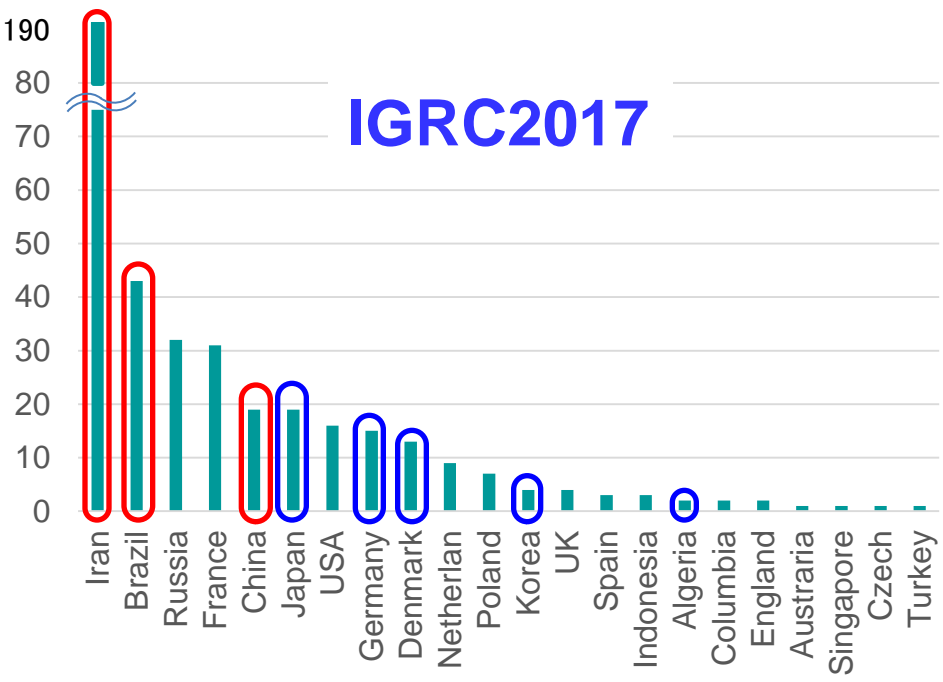
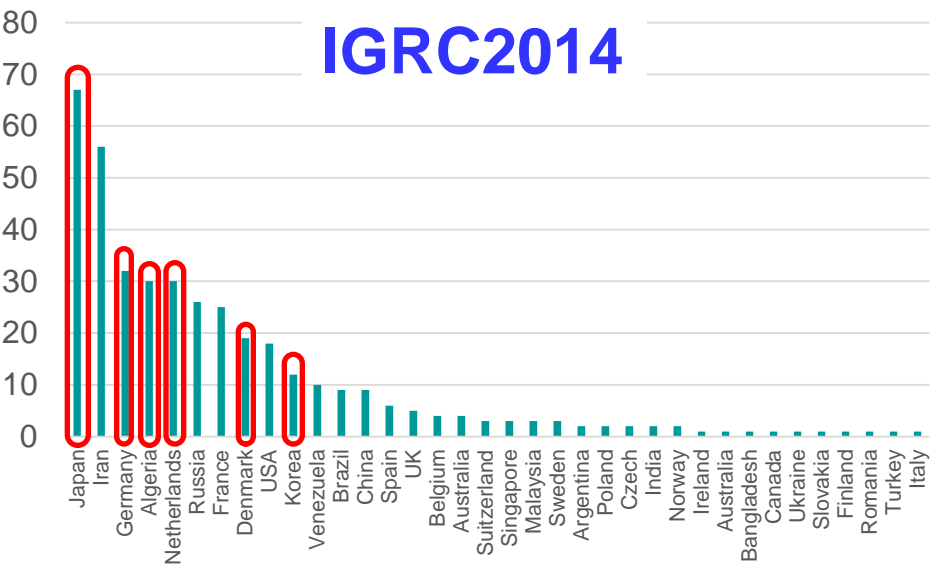
How about for IGRC2017 ?

Total number of the approved papers per country

IGRC2017

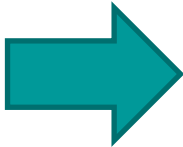
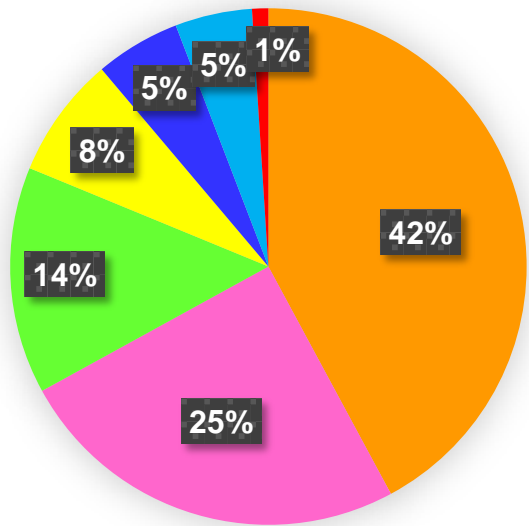


Change of the number of the approved papers from 2014 to 2017

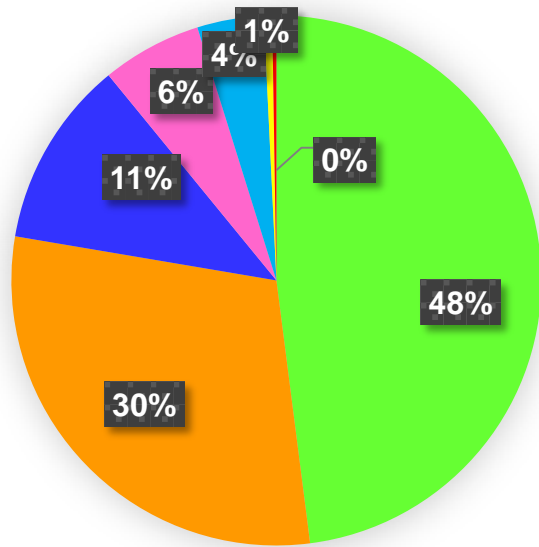


Comparison of the Percentage of the approved papers by area

IGRC2014



IGRC2017



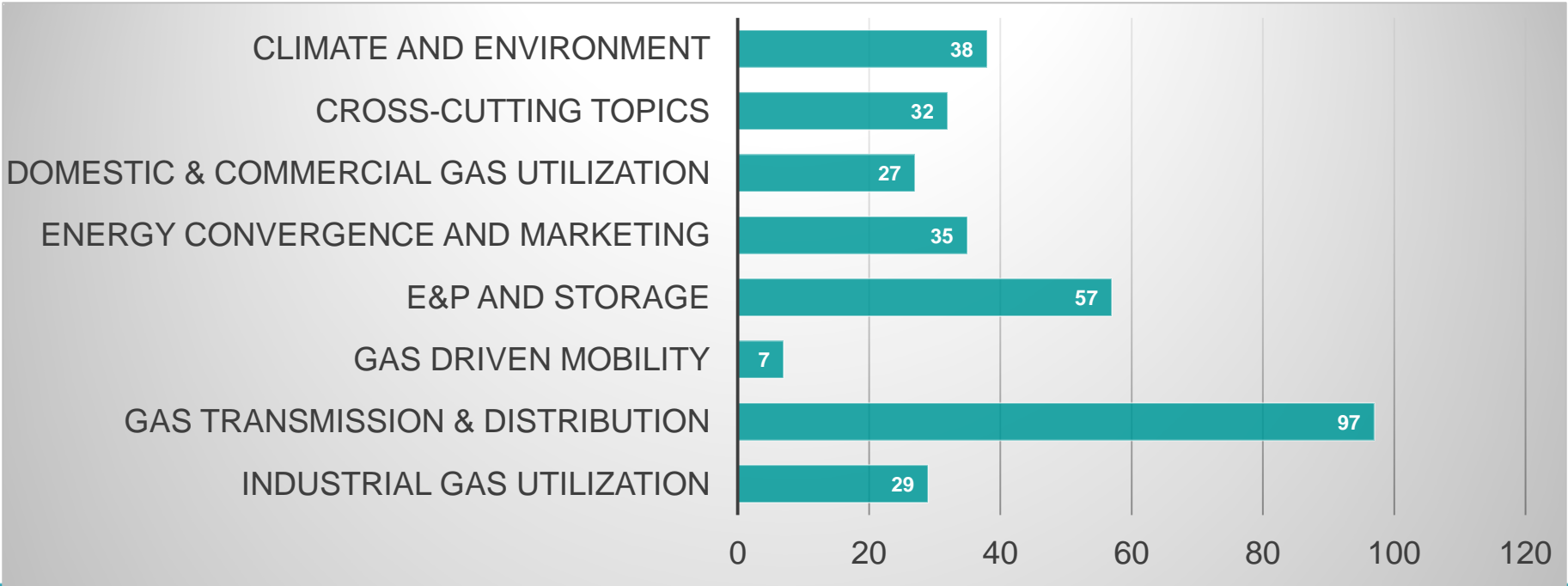
- Iran
- Europe
- South America
- Asia
- North America
- Africa
- Oceania

Main topics in IGRC2017

- ✓ Climate and environment
- ✓ Cross-cutting topics
- ✓ Domestic & commercial gas utilization
- ✓ Energy convergence and marketing
- ✓ E&P and Storage
- ✓ Gas Driven Mobility
- ✓ Gas transmission & distribution
- ✓ Industrial gas utilization

Total number of the approved papers by major topics

IGRC2017



Overview

● *Summary of IGRC2017*

- Number of Papers and Participants
- Conference topics

● ***IGU work (Korean presidency)***

- Results of survey by the Korean Presidency Team
- Main theme and strategy in the next triennium

● *Vision for next IGRC2020*

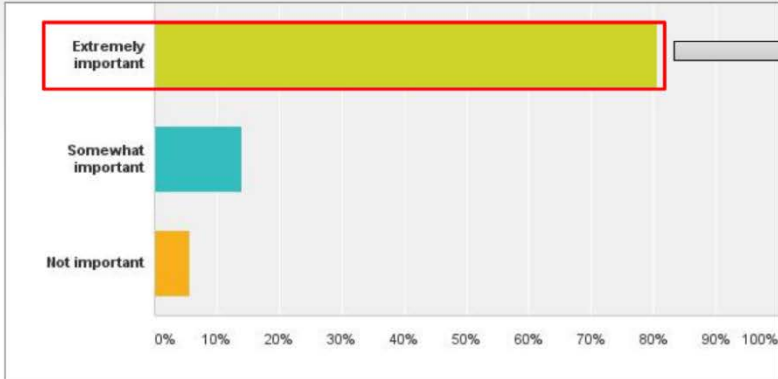
- How to build the next plan of R&D&I committee
- Subject for the next IGRC

Result of the survey by Korean Presidency Team

Environmental Engagement

- Overcome environmental challenges
- Enhance energy efficiency
- Advocacy for public acceptance

Importance of environmental engagement?



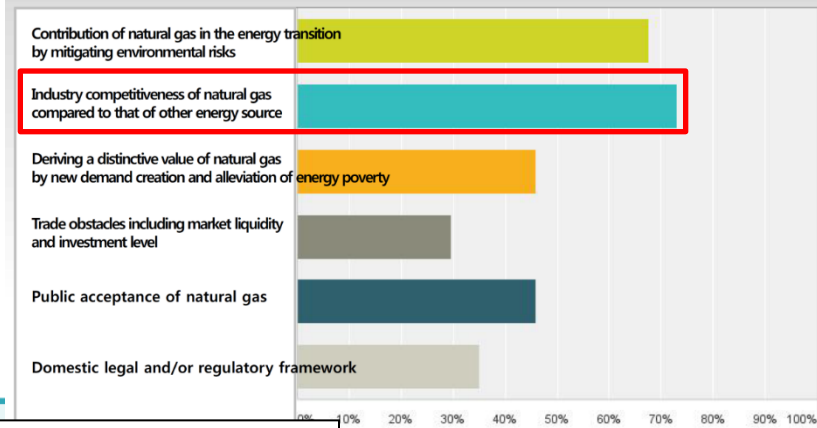
From the Survey, more than 80% of respondents answered that Environmental engagement in global gas industry is extremely important!

Result of the survey by Korean Presidency Team

Industry Competitiveness 

- Affordability
- Flexible market
- Strategic partnership & policy cooperation

Important issues facing the gas industry



From the Survey, more than 70% of respondents answered that Industry competitiveness of natural gas compared to other energy source is most important issues.

Importance of the Value Creation in the Gas Industry

Value Creation



- Technological innovation
- Collaboration with renewables
- Accessibility improvement

To create new value of natural gas?

Survey respondents suggested the ideas on the creation of a new value in natural gas;

- ✓ Gas use for transportation
- ✓ New uses for natural gas, technologies and appliances
- ✓ Gas as renewable (biogas, synthetic gas)
- ✓ Pairing with renewables and reduction of greenhouse emissions
- ✓ Balanced pricing mechanism & Enhance infrastructure connection
- ✓ Gas as a vehicle for addressing global energy poverty

Main theme in the Korean Presidency term

Our Future
Powered by Gas

→ Korea's bidding slogan

+

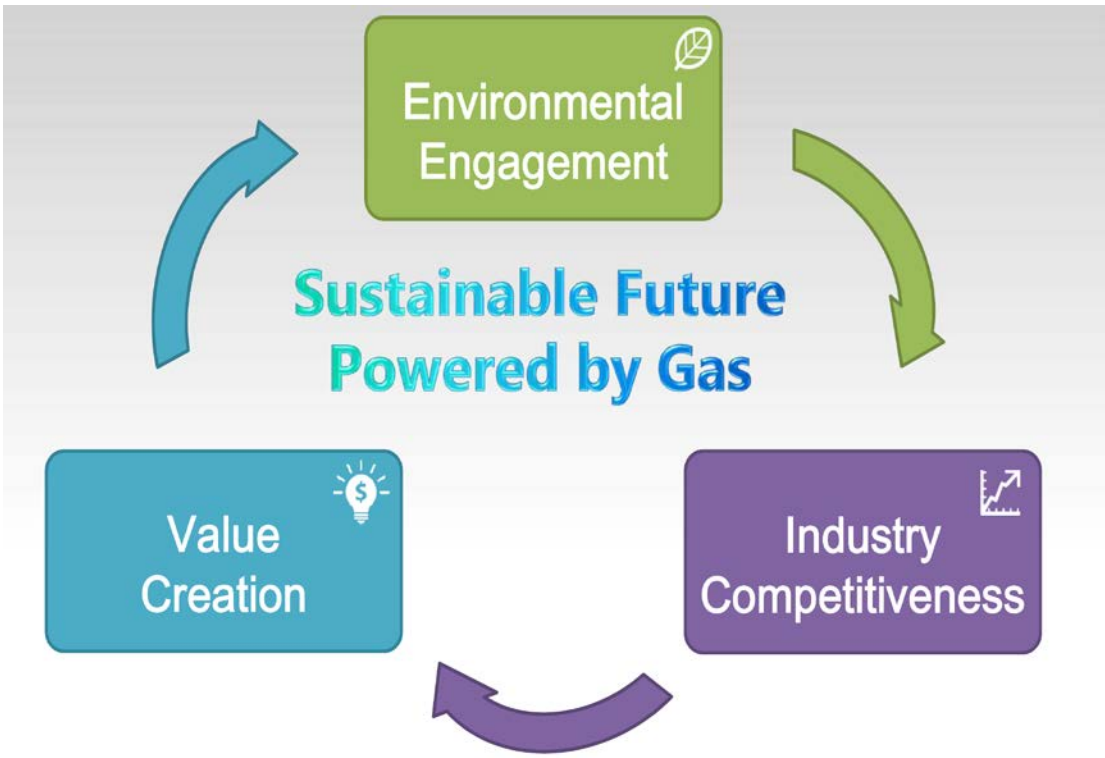
Sustainability

→ Top priority in global industry



Sustainable Future
Powered by Gas

Strategic focus in the Korean Presidency



Overview

● *Summary of IGRC2017*

- Number of Papers and Participants
- Conference topics

● *IGU work (Korean presidency)*

- Results of survey by the Korean Presidency Team
- Main theme and strategy in the next triennium

● ***Vision for next IGRC2020***

- **How to build the next plan of R&D&I committee**
- **Subject for the next IGRC**

Value Chain of Natural Gas and Technologies

- Gases from renewables (biogas, hydrogen)
- Power to gas and convergence of energy systems
- Methane emissions;
- Carbon management
- CO2 emissions

- Planning, forecasting Markets.
- Efficiency increases through advanced technologies
- Virtual power plants
- Innovation management



- Gas quality management
- Asset integrity management
- Design and operation (Corrosion)
- Measurement; Maintenance; Inspection (internal and external pipeline inspection)
- Gas detection
- Gas odorisation
- Gas quality tracking and modelling
- Gas transportation systems safety
- LCA and methane emissions
- LNG and small-scale LNG, satellite LNG

- Gas quality management
- Asset integrity management
- Design and operation (Corrosion)
- Measurement; Maintenance; Inspection (internal and external pipeline inspection)
- Gas detection
- Gas odorisation
- Gas quality tracking and modelling
- Gas transportation systems safety
- LCA and methane emissions
- LNG and small-scale LNG, satellite LNG

- Domestic gas heating and cooling
- Hybrid systems, smart grids
- Micro CHP, Mini CH
- Fuel cell
- NGV, FCV, Refueling station
- Powered by gas (ships, trains, airplanes.)
- Gas as feedstock (e.g. DME);
- Gas for process and production
- GTL
- Large scale heat & power production

Most important keyword in the next work of R&D

“Sustainability of infrastructures and assets for the gas industry”

New direction of R&D in the future

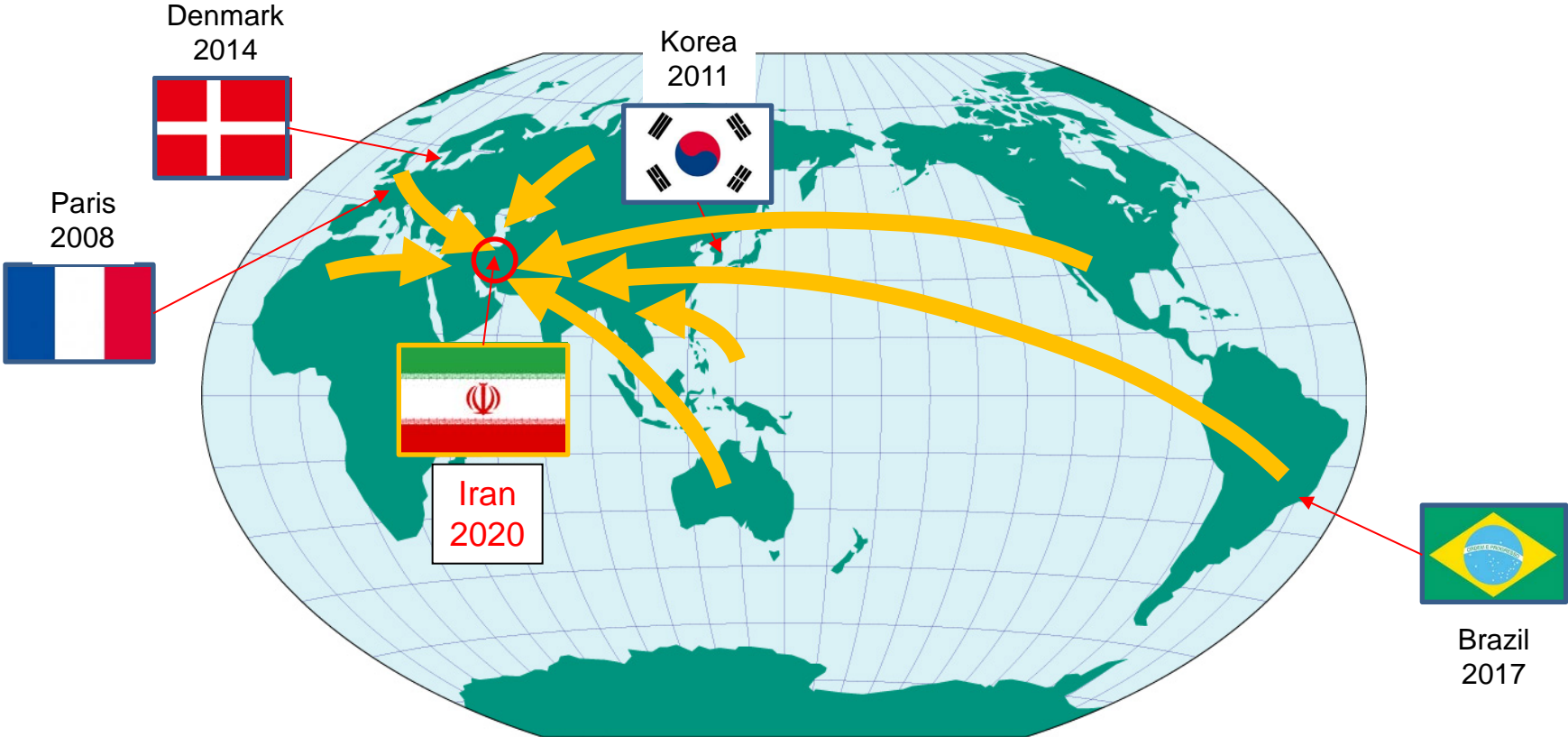
Harmonize with renewable energy



Digitalization



Previous venues of IGRC and the next



We should consider these subjects in IGRC2020

- We should consider regional characteristics in Iran.
- How can we make IGRC more attractive?
- We should balance the presentation themes.
- How can we select the suitable papers?
- How can we open the door for many presenters?

Thank you for your attention!
See you in Teheran

Obrigado !