

26th World Gas Conference

1 – 5 June 2015, Paris, France



Global partnering in energy innovation - effective collaboration
Rod Rinholm
Gas Technology Institute (GTI)



Research Development and Innovation – PGC F

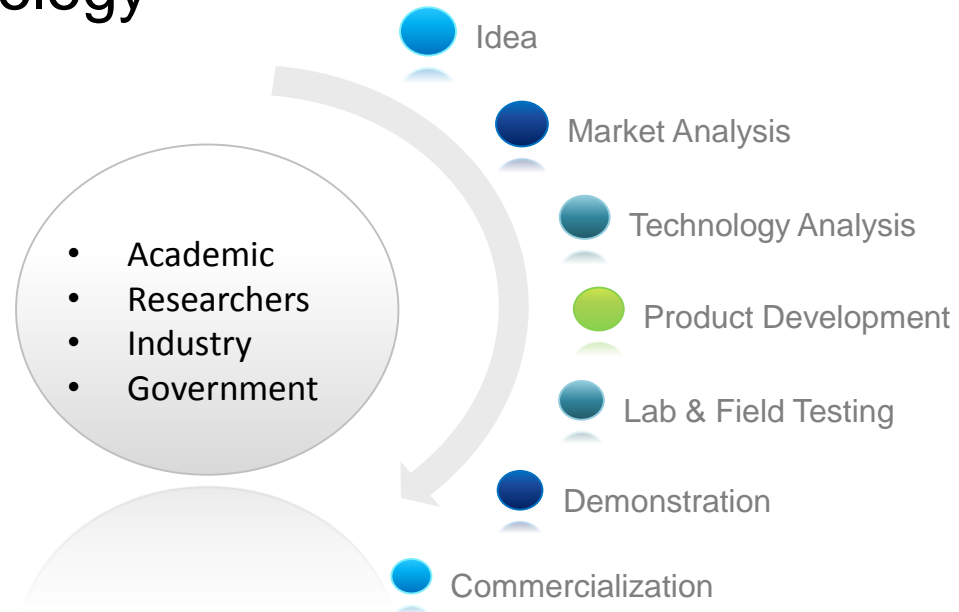
- Program developed by IGU Research Committee
 - Dr. Jack Lewnard, USA, Chair 2012-15
 - Dr. Gerald Linke, Germany, Chair 2015-18
 - 54 members for 2012-15 Triennium
- 3 Study Groups
 - **SG-1** – Technical Program for IGRC2014
 - Held September 2014 in Copenhagen
 - **SG-2** – Development of International Gas RD&D Collaborative Programs
 - **SG-3** – Gas Convergence with Electric and Renewable

Global RD&D Activity

- Review profiles of natural RD&D institutions and organizations
- Application and Uses
 - Identify current global RD&D activity
 - Facilitate communication and collaboration among researchers
 - Solicit participation and involvement in IGRC
- Program will evolve and continue as ***“Research Radar”***
 - Identification and dialogue on current R&D topics along the gas value chain

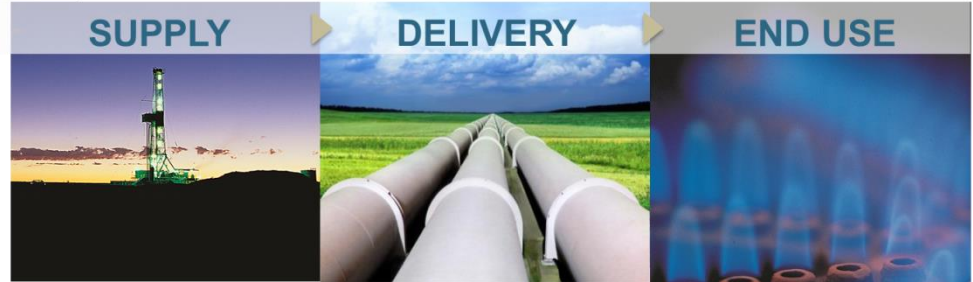
Research Collaboration Areas

- Models of Collaboration
 - Jointly supported RD&D projects
 - Partnering on technology solicitations
 - Consortia R&D
 - Technology demonstrations
 - Other...
- Common needs and interests



Prospective Technology Areas of Interest

- Natural gas supply
 - Shale/unconventional
 - Biomethane and SNG
 - LNG
- Gas infrastructure
 - Safety, system development, operations efficiency
 - Smart Grid
- Hybrid gas-renewable systems
- Gas applications



Today's Session

1. **Assessment of Global Gas R&D Outlook with Patent Analytics**
 - Kristin Wu, Intellectual Property Office of Singapore, Singapore
2. **How to achieve effective collaborative results in gas R&D end use technology**
 - Dan Goldberger, Energy Technology & Innovation Canada, Canada
 - *Presented by* Paul Cheliak, Canadian Gas Association
3. **ENTRANCE TO THE SECOND LIFE OF GAS: ENTRANCE AS SOURCE OF INNOVATION AND HUMAN RESOURCES**
 - Dr. Gerard Martinus, GasTerra, B.V., The Netherlands
 - *Presented by* Dr. Jan-jaap Aue, Dean Centre of Expertise Energy, Hanze University of Applied Sciences
4. **SUCCESSFUL COLLABORATION PROJECTS – A SERIES OF UK TECHNOLOGICAL CASE STUDIES IN A RANGE OF NEW ASSET MANAGEMENT IN-PIPE INVESTIGATIVE TOOLS**
 - Wez Little, Innovations Director, Synthotech, Ltd., UK
5. **Dynamic (CFD) Simulation Model for Mixed LNG Storage Technology**
 - Mr. Naoto Mikami, Manager Technical Section, LNG Engineering Department, Tokyo Gas, Japan