



## ***The International Smart Grid Action Network***

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***Russ Conklin, U.S. Department of Energy  
Vice Chair, ISGAN Executive Committee***


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## *What and Why is ISGAN?*

**A mechanism for bringing high-level government attention and action to accelerate the development and deployment of smarter electricity grids around the world.**

### **ISGAN...**

- Fulfills a key recommendation in the Smart Grids Technology Action Plan (released by Major Economies Forum Global Partnership, 2009)
- Was launched as one of 11 initiatives under the Clean Energy Ministerial (in 2010)
- Is organized as an IEA Implementing Agreement (in 2011)
- Sponsors activities that build a global understanding of smart grids, address gaps in knowledge and tools, and accelerate smart grid deployment
- Builds on the momentum of and knowledge created by the substantial smart grid investments being made globally
- Will leverage cooperation with the Global Smart Grid Federation  and others

## Current ISGAN Participants

<i>Australia</i>		<i>India</i>		<i>The Netherlands</i>	
<i>Austria</i>		<i>Ireland</i>		<i>Russia (new)</i>	
<i>Belgium</i>		<i>Italy</i>		<i>Spain (new)</i>	
<i>Canada</i>		<i>Japan*</i>		<i>Sweden</i>	
<i>China*</i>		<i>Korea</i>		<i>Switzerland</i>	
<i>Finland</i>		<i>Mexico</i>		<i>United Kingdom</i>	
<i>France</i>		<i>Norway</i>		<i>United States</i>	
<i>Germany</i>		<i>European Commission*</i>		*Participate through the Clean Energy Ministerial (CEM), but have not yet signed the ISGAN Implementing Agreement	

Four (4) other countries invited to join: Brazil, Denmark, South Africa, and Turkey

### Goal: Accelerating the Transition to Clean Energy Technologies

- ① High-Level Policy Dialogue
- ② Technical Cooperation
- ③ Engagement with the Private Sector and Other Stakeholders

***Third Annual CEM meeting (CEM3) will take place in London, UK, April 25-26***

>90% of Global Clean Energy Investment

> 80% of Global GHG Emissions



Australia



European  
Commission



Brazil



Canada



China



Denmark



Finland



France



Germany



India



Indonesia



Italy



Japan



Korea



Mexico



Norway



Russia



South Africa



Sweden



Spain



United Arab Emirates



United Kingdom



United States

## *11 Clean Energy Ministerial Initiatives*

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**International  
Smart Grid  
Action Network**

Super-Efficient  
Equipment and  
Appliance  
Deployment  
Initiative

Electric Vehicles  
Initiative

Bioenergy  
Working Group

Carbon Capture  
Use and Storage  
Action Group

Clean Energy  
Education and  
Empowerment  
Women's  
Initiative

Clean Energy  
Solutions  
Centers

Global Superior  
Energy  
Performance  
Partnership

Multilateral  
Solar and Wind  
Working Group

Solar and LED  
Energy Access  
Program

Sustainable  
Development of  
Hydropower  
Initiative

### **Foundational Annexes**

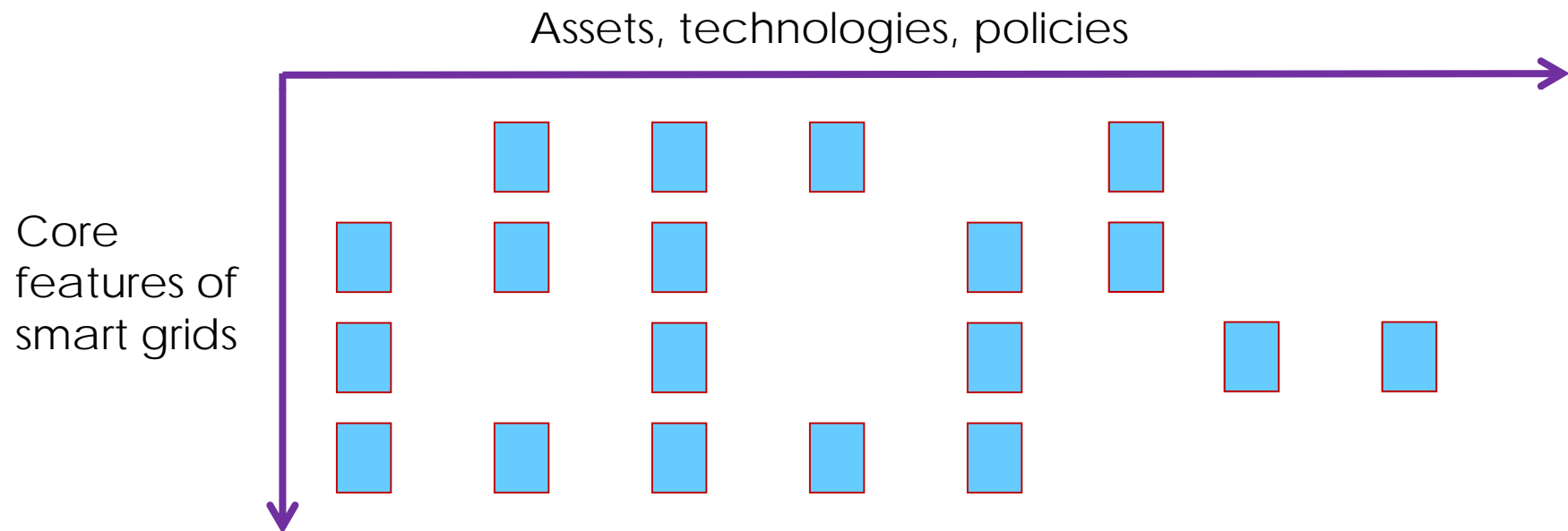


### **Emphases**



- **Develop a unified ISGAN framework for assessing smart grid features and technologies**
- **Prioritize this framework for each participating country**  
(i.e., what are the motivating drivers and specific technology interests)
- **Map this framework against existing inventories, surveys, and assessments**
- **Identify gaps, opportunities, synergies, and inconsistencies and make recommendations, if appropriate**
- **Expand framework to take in account key metrics and indicators**
- **Develop appropriate tools for disseminating results**  
(complement, not duplicate existing platforms)

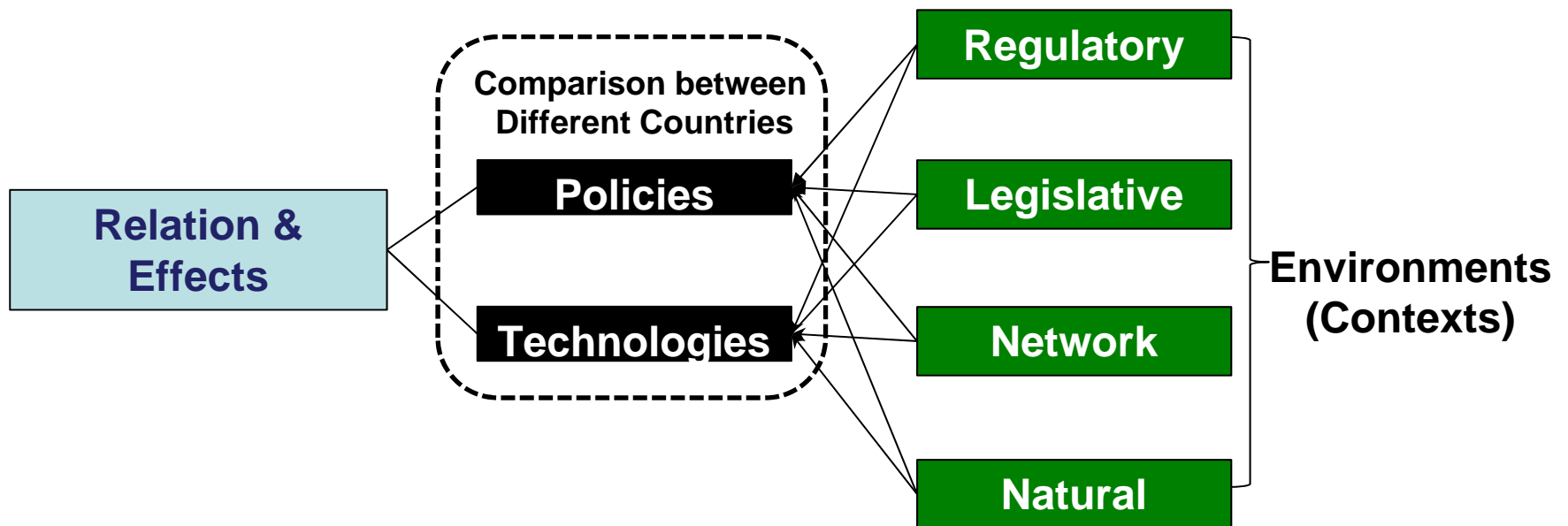
- Objective: Analyze relationships between core features of smart grids and corresponding enabling assets and technologies, evaluated against the motivating drivers



**CHALLENGE:** Framework must work for developed and emerging economies.



- **Assess best practice examples of case studies**
- **Develop and apply a common case study template & methodological framework**



- **Assessment, modification, and application of methods to measure the present level of maturity of networks (i.e., the “smartness”)**
- **Assessment, modification, and application of existing benefit-cost methodologies and tools, as well as development of new ones**
- **From these analyses, develop appropriate toolkits (including KPI definition)**
  - Range of levels targeted: From high-level, broad-based methodologies to more detailed system-level approaches to project- or technology-level approaches
  - Builds on metrics and data identified by Annexes 1 & 2, and other sources

### ***In short: Knowledge management and info sharing by design***

- **Develop a platform that compiles smart grid concepts from high-quality sources and makes them accessible to policymakers (e.g., online glossary)**
- **Produce brief, timely analytical reports that clarify important issues or raise key questions in smart grid policy and deployment**
- **Establish platforms (or augment existing ones) for knowledge management and collaboration among ISGAN participants**
- **Develop other tools for collaboration and information sharing**

*Proposed Annex*

### **Power Systems – Transmission, Distribution, and Interfaces**

(led by Sweden/Norway; integrates ENARD\* Work Programme into ISGAN)

*\*Implementing Agreement for Electricity Networks Analysis, Research & Development*

*Proposed Annex*

### **Smart Grid International Research Facility Network (SIRFN)**

(led by U.S.; to be coordinated with APEC Smart Grid Test Beds Network)

*Proposed Annex*

### **Governance During the Smart Grid Transition**

(led by Austria; social sciences focus)

*Proposed Annex*

### **Smart Grid Interoperability Frameworks**

(led by Korea; integration and synthesis exercise)

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**Cooperation with Other IEA Implementing Agreements, such as DSM and 4E**  
Directly through IEA Electricity Coordination Group, End Use Working Party, etc.

**Cooperation with Other CEM Initiatives**

Indirectly through CEM public-private Roundtables, CEM meetings, and other fora

**Dialogue/Engagement with Other Int'l Efforts, Private Sector, etc.**

e.g., Global Smart Grid Federation, US-EU Energy Council, APEC Smart Grid Initiative, DERlab e.V., Smart Grid Interoperability Panel

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- **10 January 2012 • Stockholm, Sweden**  
ENARD Power Systems Annex: Scoping for ISGAN Integration
  - **24-26 January 2012 • Washington, DC and Albuquerque, NM, USA**  
ISGAN / APEC Smart Grid Test Bed Networks Workshop
  - **2-3 February 2012 • Delhi, India**  
Prep Meeting for 3<sup>rd</sup> Clean Energy Ministerial
  - **24 February 2012 • Brussels, Belgium**  
ISGAN Annex 1 Meeting
  - **Week of 26 March 2012 • Mexico City, Mexico**  
March 26-27 – Joint IEA/ISGAN Workshop : “Smart Grids in Distribution Networks: How2Guide drafting workshop”  
March 28-30 – ISGAN 3<sup>rd</sup> Executive Committee meeting
  - **25-26 April 2012 • London, UK**  
Third Clean Energy Ministerial
  - **21 May • Bregenz, Austria**  
ISGAN Workshop(s) TBD (as part of Austria Smart Grids Week 2012)
  - **Autumn 2012 • Lyon, France**  
4<sup>th</sup> ISGAN Executive Committee meeting
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## Questions? Comments? Concerns?



Russ Conklin  
Office of Climate Change Policy and Technology  
U.S. Department of Energy  
+1 (202) 586 8339 [russell.conklin@hq.doe.gov](mailto:russell.conklin@hq.doe.gov)