IEA Digitalization and Energy Project

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Context

- Growing pervasiveness of digitalization across the energy sector value chain
- Digital companies’ increasing interest in energy
- Energy use increasingly shaped by digital enablers
- Digitalization emerging across several IEA work streams

General consensus that digitalization could disrupt significant parts of the energy sector
IEA efforts on digitalization and energy

- **Past efforts** include:
  - *Impact of Smart Grid Technologies on Peak Load to 2050* (2011)

- While interest on digitalization is wide and strategic, **current understanding** of the scale and scope of potential impacts is **limited**, particularly **quantitative and analytically-rigorous assessments**

- 2017 Digitalization and Energy Report
2017 IEA Digitalization and Energy Report

An assessment of the implications of digitalization on the energy sector, bringing together new quantitative assessments, qualitative insights, and analysis of policy implications.

- The current state of interlinkage between energy and digital
- Impact of digital economy on energy demand
- Impact on energy supply – primary focus on the power sector
- New business models and markets
- Challenges and opportunities for policy-makers
2017 Key Milestones

IEA Working Group [Jan - ]
- Expert consultations [Feb - ]
  - Brussels
  - Silicon Valley
  - Industry Advisory Board
- Connected Devices Alliance
  - RED RIAB (27 Mar)
  - WEO Development workshop (27 Mar)
  - EDC ESDG annual stats meeting (26-27 Apr)
  - CEM8 Beijing (6-8 Jun)

Cross-Cutting Workshop [5 April]
+ deep-dive sessions at IEA [6 April]

Publication [Mid-October]

IEA Ministerial [7-8 November]
Issues for Discussion: What can IEA do to help?

• What digital technologies and digitally-enabled services will have significant impacts in the near term? Which are more distant prospects or may be hype?

• How is your company looking to capitalize on the opportunities of digitalization? What are you doing differently already, and what are your plans going forward?

• How is digitalization changing the nature of energy related investments in traditional energy infrastructure, digital hardware, and analytics architecture? Who is investing in what?

• How can governments manage the opportunities and challenges of digitalization, including broader issues of employment, data ownership, privacy, and energy access?

• What role might digitalization play in facilitating a more cost-effective clean energy transition?
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