Natural Resources Canada | Ressources naturelles Canada

Strategic perspectives on digitalization, energy efficiency and smart grids.

Joyce Henry | Director General, Office of Energy Efficiency,
Natural Resources Canada, Government of Canada

March 2020 ▪ IEA, Webinar









Canada

Digitalization of energy efficiency is an emergent opportunity…and challenge

By 2024, over 34 billion devices will be connected globally. This number is expected to grow as greater levels of connectivity are demanded from the devices that we use in our homes and businesses.



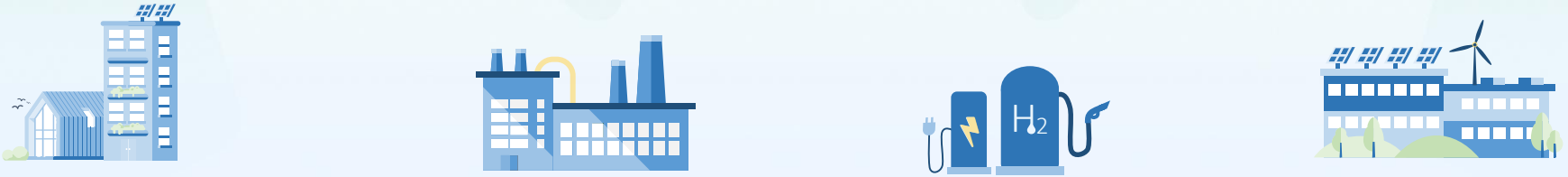
There are a number of important shifts in our thinking that we need to make as result of digitalization.

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Digitalization to enable the energy transition?

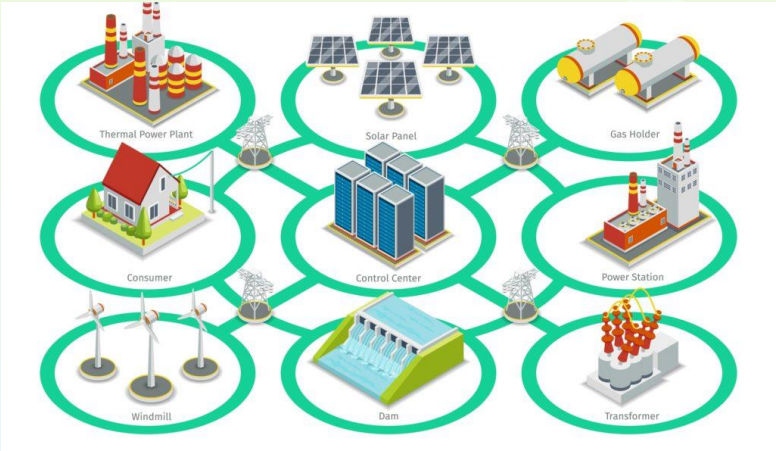
In Canada's view, for digitalization to steward the energy transition, **strong policies** must guide tools such that digitalization becomes **a key enabler** of the energy transition.

Natural Resources Canada, through the Office of Energy Research &Development, is providing RD&D funding to **develop and leverage digitalization technologies** to improve the energy efficiency of houses, buildings, and communities.



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Development of smart grids to to reduce GHG emissions



- Make the electricity system **more flexible and adaptable for future technology**
  - increased renewable energy and other distributed energy resources)
- Ensure **safer and more secure** delivery of electricity
- Provide foundations for **new market structures** and a higher quality of service for customers

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Canada is also continuing our work on ‘no regrets’ actions

…including recommendations from IEA’s *Digitalization and Energy* report:

- Building digital awareness, expertise, and capacity within our organization
- Experimenting, including through "learning by doing" pilot projects and via partnerships
- Participating in broader inter-agency discussions on digitalization and energy efficiency

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Thank you!

Questions?

Joyce Henry, Director General
Office of Energy Efficiency
Natural Resources Canada
580 Booth Street, Ottawa, Ontario
Joyce.Henry@canada.ca

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