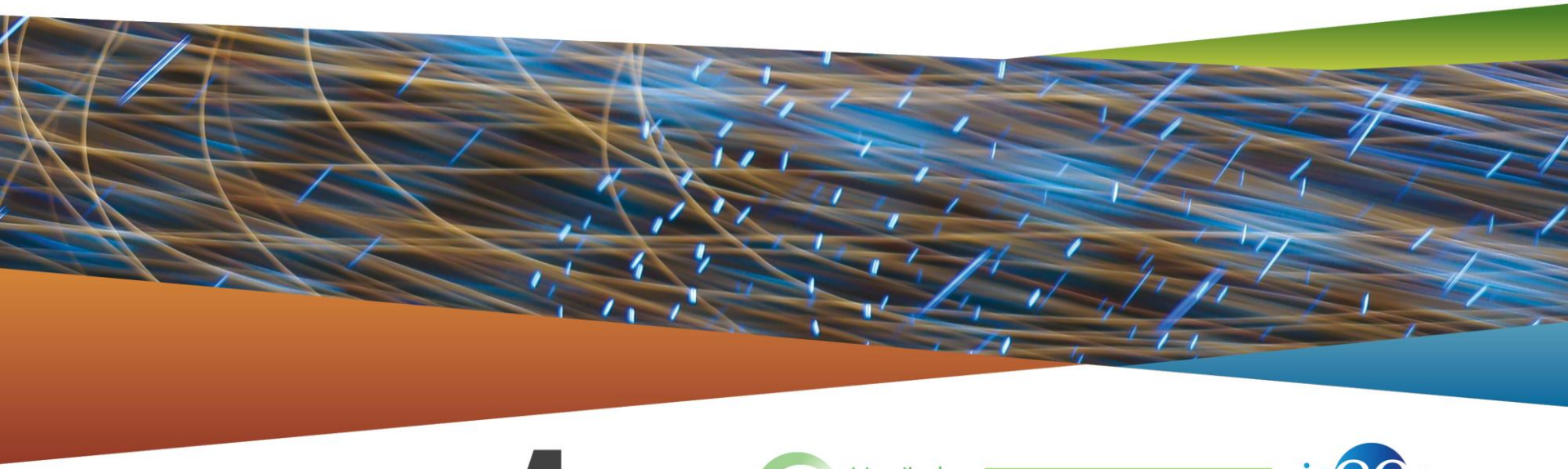
G20 ENERGY EFFICIENCY ACTION PLAN:
Networked Devices

PARIS | JANUARY 2015

Australia 2014



4E Energy Efficient End-use Equipment International Energy Agency

iea International Energy Agency

SEAD Super-Efficient Equipment and Appliance Deployment

ipeec International Partnership for Energy Efficiency Cooperation

Potential Areas of Government – Industry Collaboration

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Goal

"participating countries will consider options for goals for reducing the global standby mode energy consumption of networked devices" *G20 Action Plan*

- Time limited: need to report to G20 meeting in Turkey (end 2015)
- Swift progress most likely through voluntary action by industry
- Voluntary action most appropriate for rapidly evolving product group

Challenges

- Voluntary initiatives need to:
  - Demonstrate results
  - Be measurable
- To include in G20 report: basis of industry/government commitment in place by mid-2015
- Voluntary action unlikely to cover all industry (in short term) – is this limiting?

Some possible initiatives

- Vision
- Adoption of IEA principles
- Awards
- Digital energy disclosure
- Protocols

Vision

- 1-Watt network standby by 2025 leading to 65% reduction of network standby
- Requires:
  - Interim milestones
  - Definition of network standby
  - Ability to measure network standby
  - Process for tracking progress
- Provides flexibility for industry
- ? Sufficient certainty for Governments

Adoption of IEA Principles

- Generic design guide for products & standards
- Promotes:
  - Interoperability that maximizes energy efficiency between networks & connected devices
  - Industry-wide protocols for energy efficiency
- Developed by IEA in 2007 – refined in More Data, Less Energy
- Version adopted by CEA et al, 2013
- Could be refined and promulgated more widely
- How do we measure impact?

Awards

- SEAD 'Global Efficiency Medal' competition
  - An incentive for industry
  - Source of data on 'best performing products'
- In future could:
  - Include 'network standby' as criteria for relevant products
  - Target network connected devices
  - Award standards or policies that promote efficiency in networks & networked products or substantial intelligent efficiency gains

Digital Energy Disclosure

- Unique feature of connected devices – can communicate information on energy performance (all modes incl. network connection)
- How do we used this transparency?
  - Could support data collection
  - Could encourage efficient product design
  - Could augment/replace physical label for some products (TVs)

Protocols

- The proliferation of different communication protocols may impede inter-operability for energy efficiency
  - Network standby and intelligent energy
- IRHMA is evaluating key protocols for ‘smart appliances’
- Industry & standards making bodies could work to ‘rationalise’ protocols and adopt a level of inter-operability to support energy efficiency
- The better protocols could be promoted by governments