

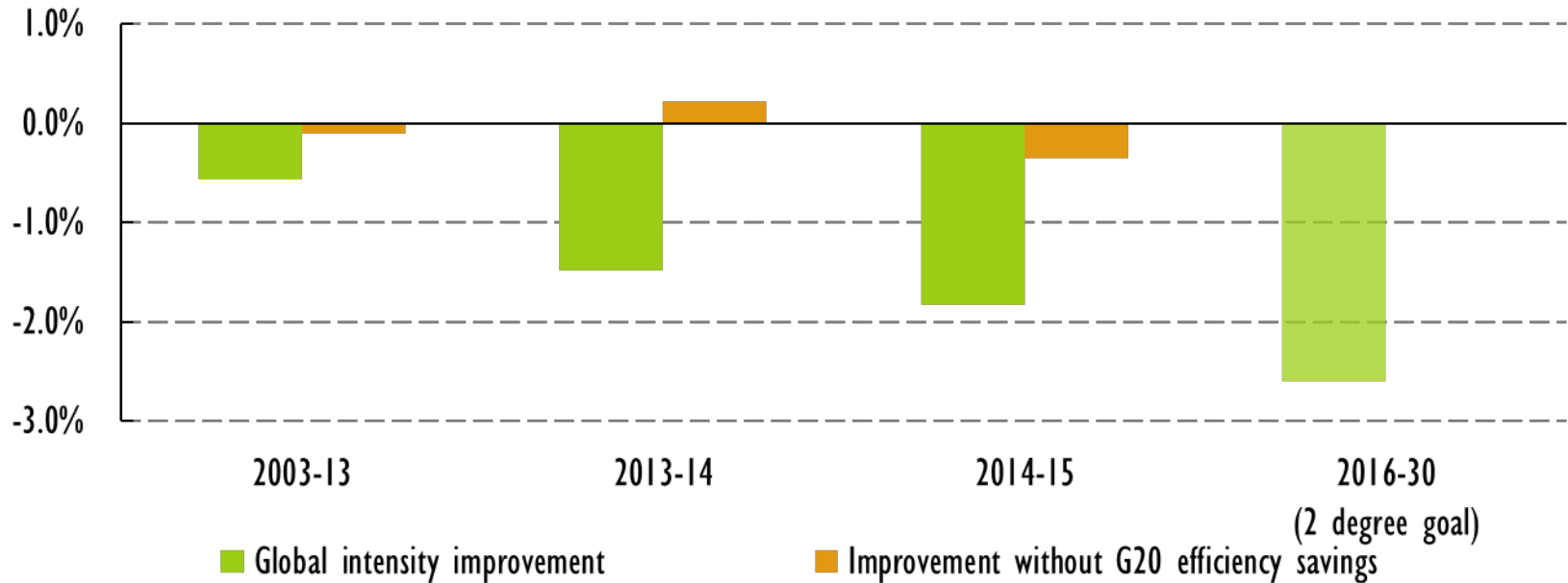


Global energy efficiency status update

Dr. Brian Motherway

Energy Sustainability Working Group – March, Berlin

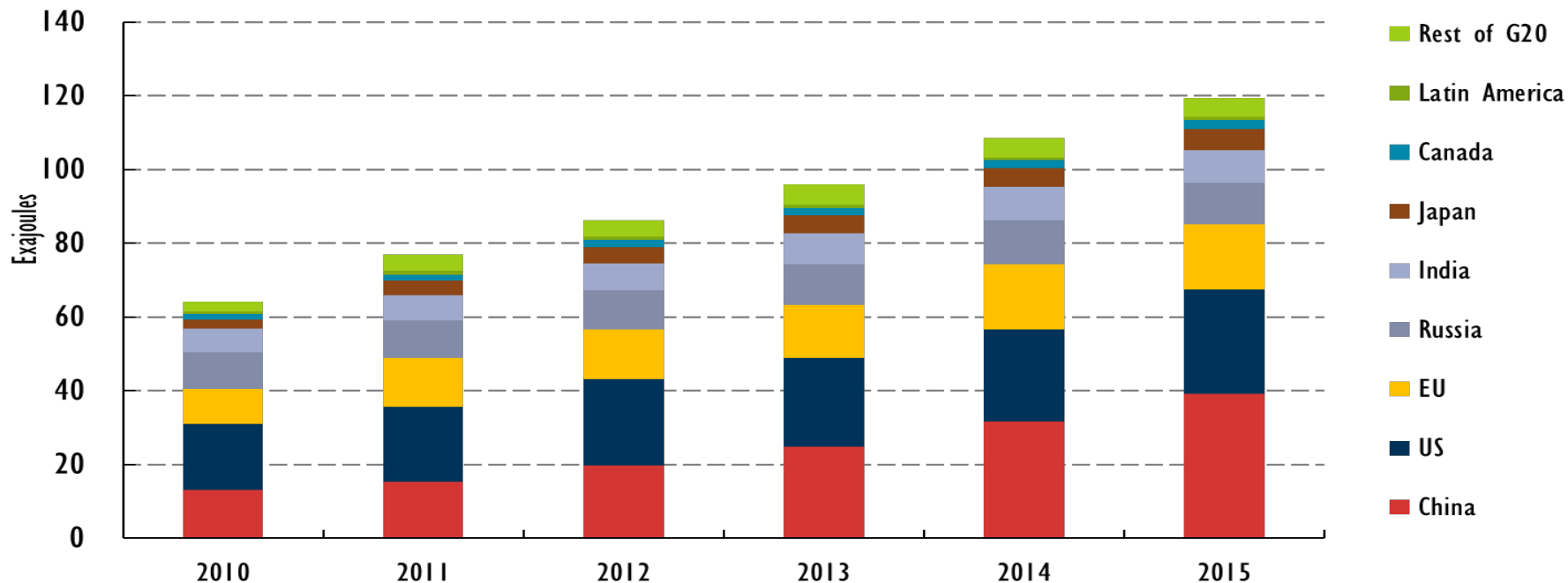
Annual percent improvement in primary energy intensity



Without efficiency savings in G20 countries, global energy intensity would have been 6% higher in 2015

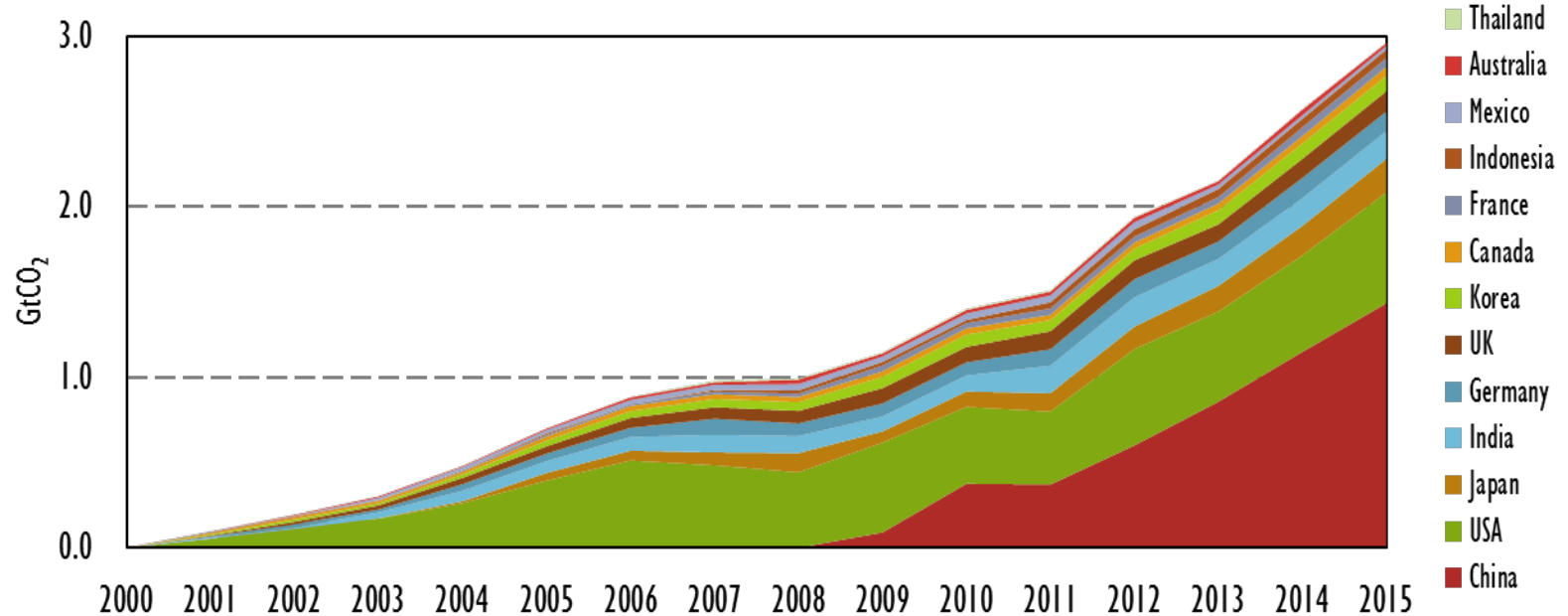
Energy savings of G20 countries have doubled since 2010

Annual energy reduction from energy intensity improvements since 2000



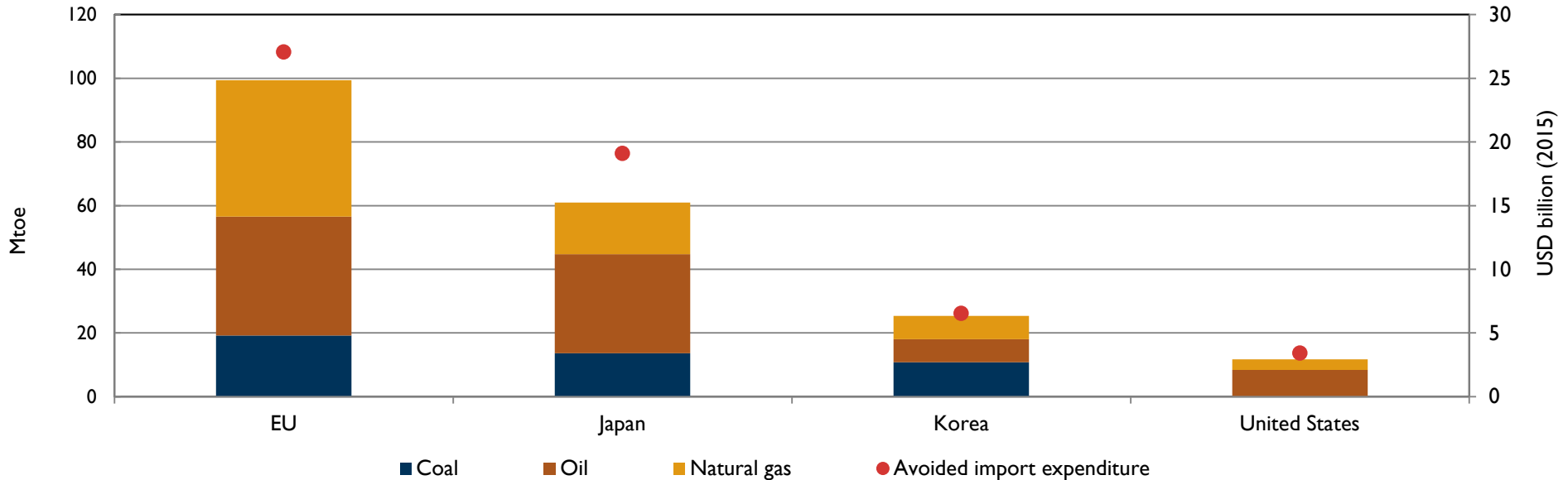
Energy savings in G20 countries rose from 12% of global demand in 2010 to 21% by 2015

Avoided greenhouse gases from efficiency gains since 2000



Without the efficiency gains in G20 countries since 2000, over 3.0 billion additional tonnes of CO₂ would have been emitted in 2015.

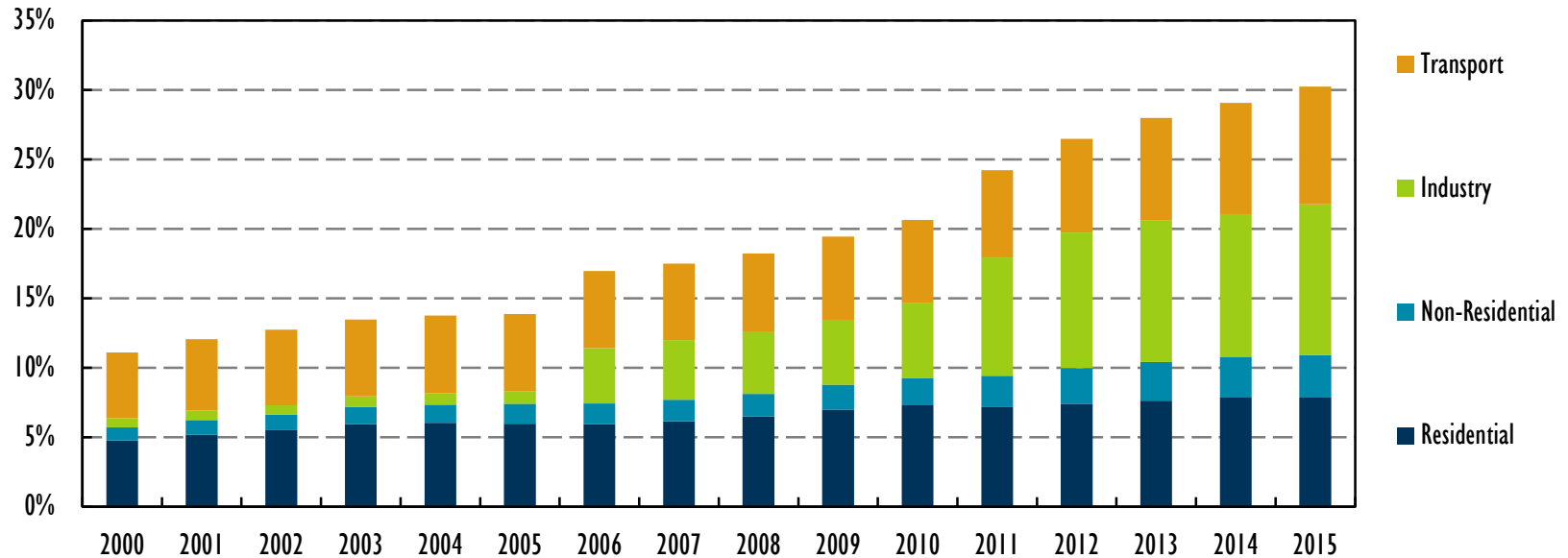
Avoided imports for sample countries from efficiency gains, 2015



Efficiency has reduced EU imports by \$27 billion - 10% of its total energy import bill.

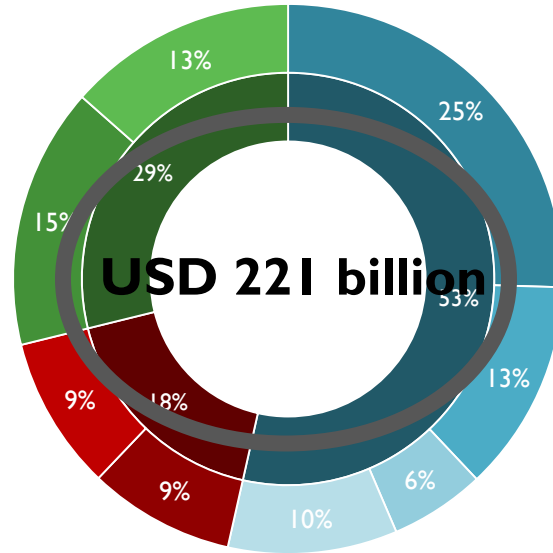
- Technology change and digitalisation
- Energy prices
- Policy

Share of global TFC covered by mandatory policies per sector



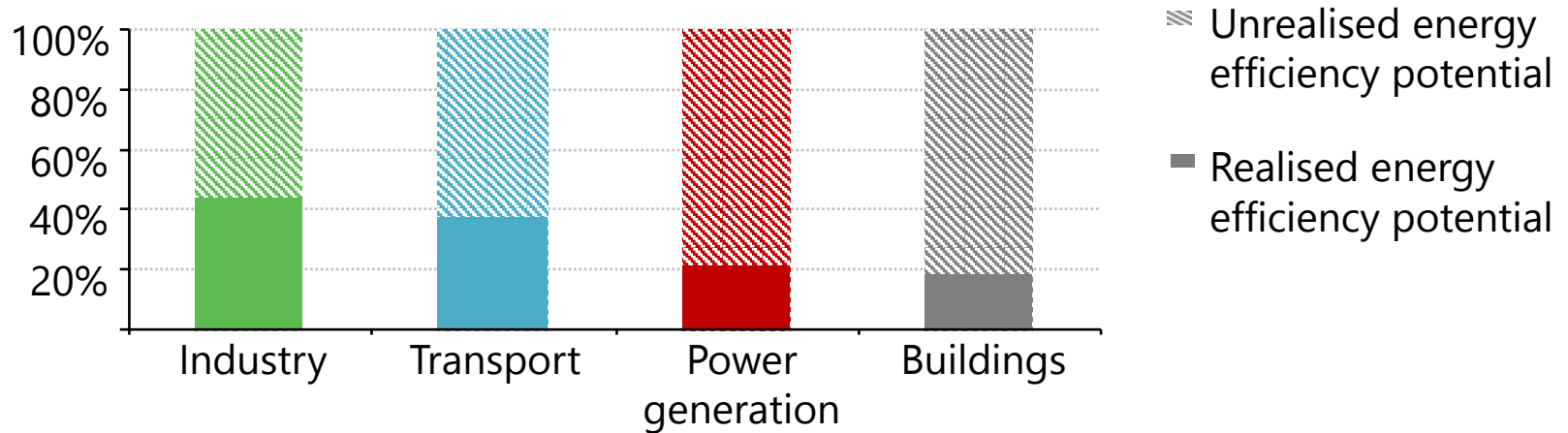
The coverage of global energy consumption has increased from 11% in 2000 to 30% in 2015

Global investment in energy efficiency by sector, 2015



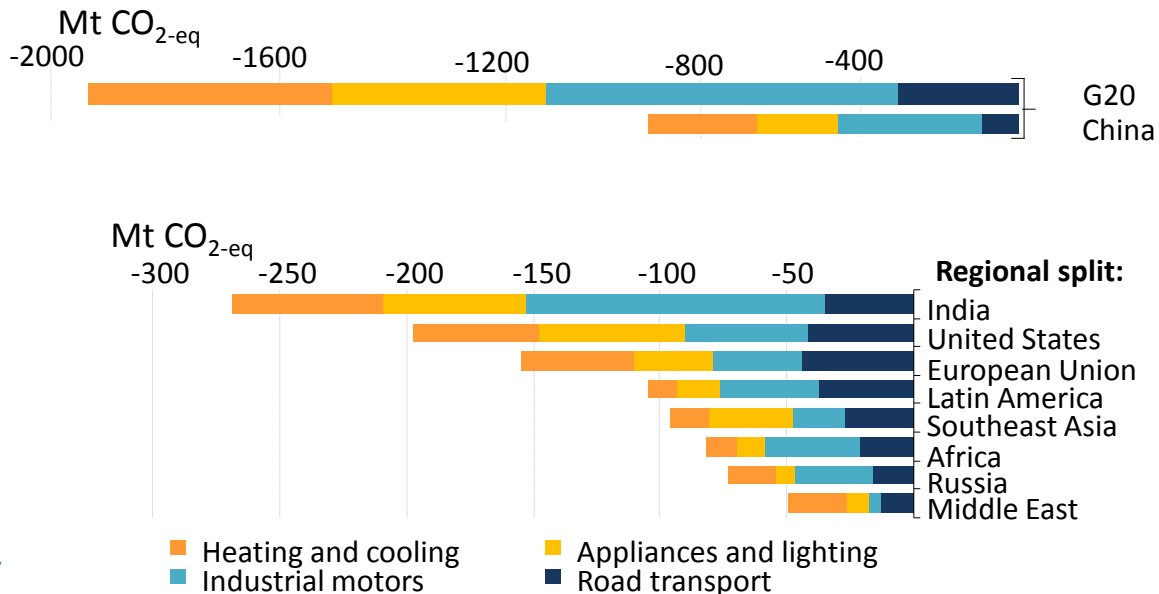
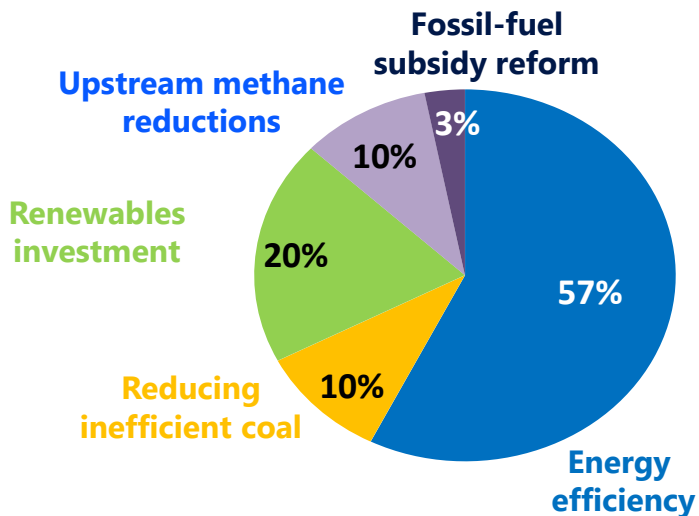
Investment in energy efficiency increased by 6% in 2015, despite lower energy prices.

Energy efficiency potential to 2035 by sector



Two thirds of efficiency potential remains untapped

Savings by measure, 2030



G20 countries account for more than 85% of the savings related to energy efficiency.

- We have made progress on efficiency, which is making large contributions to many energy goals
- But energy efficiency has much more potential to support all energy policy imperatives
- Policy delivers
- Energy efficiency is the one energy resource that all countries have in abundance
- Our experience is that all countries have lessons to share and benefit from exchange and collaboration

The Connected Devices Alliance

- Networked Devices – a major element of the digital economy
- Speed of technology evolution is challenging – government policy is critical to realise the potential energy and sustainability outcomes from the digital economy
- The Connected Devices Alliance brings together Government and business to explore key issues
- The CDA Principles cover products & policies and are a significant step towards maximising innovation and energy savings in the digital economy
- Supported by governments, major technology companies and NGOs, including UK, Japan, Korea, Sweden, Denmark



G20 GERMANY 2017

<http://cda.iea-4e.org/cda-principles>



- To provide a forum for participating G20 countries to share knowledge and experience in collecting and using energy efficiency data for policy making.
- New work stream agreed by G20, June 2016, to be led by France (ADEME) and the IEA, with participation from as many G20 members as possible on a voluntary basis.
- First workshop held in Paris, December 2016 (10 G20 countries participated)
- Participation is voluntary. Work programme driven by participants.
- Next steps: we are keen to confirm countries' interest. First major workshop later in 2017
- Areas of focus may include:
 - Production of methodological guidelines
 - Training and capacity building
 - Sharing practices across countries
 - Dissemination and communication



