Fostering greater multilateral collaboration to make clean energy widely affordable

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The case for action on clean energy RD&D collaboration

• Innovation in Clean Energy Technologies is critical
• IEA Energy Technology Perspectives 2015 states that:
  
  “Innovation support for technologies across all energy sectors provides the greatest potential to keep 2 degree climate goal achievable”

• COP21, Lima Paris Action Agenda, post-2015 focus on delivery.
• Need to accelerate progress to reduce clean energy costs.
Global R&D Investment in Renewable Energy
2004 – 2014  $bn

Source Bloomberg, Bloomberg New Energy Finance, IEA, IMF, various government agencies
Building on Existing International Initiatives

Lots of good work. Scope / need to do more.

Strengthen initiatives:

- High level strategic direction & support;
- Transparency – be clear on who is doing what;
- Need to follow through and implement roadmaps.
3 Pillars to Mission Innovation:

1. **Double Governmental Investment in Clean Energy Innovation**
   - 20 countries pledging to double public funding for relevant clean energy RD&D
   - UK’s commitment – doubling relevant RD&D investment to $600m in 2020/21.
2. Private Sector and Business Leadership.

- Close collaboration with private sector investors.
- *Breakthrough Energy Coalition* - to date 29 investors from 10 countries

- Investment of patient capital at unprecedented levels into early-stage technology development. Principles:
  
  - **Invest Early** – in transformative ideas, getting them out of the lab, on the path to commercialization. Flexible approach to early stage investments.
  
  - **Invest Broadly** – don’t know where the best ideas will come from, so will invest across a number of sectors.
  
  - **Invest Boldly** – looking for outliers, potential to be dramatically more efficient, scalable, or cheaper.
  
  - **Invest Wisely** – will work in partnership to ensure in depth technical review and analysis.
  
  - **Invest Together** – government research pipelines are enablers, will focus investments in Mission Innovation countries.
3. Fostering increased transparency and strengthening collaboration.

- Additional funding is important … but also must invest wisely.

- UK has championed this need (through GAP & ICE).

- UK’s view – we need:
  a. a better, shared, high-level understanding of what we are trying to achieve;
  b. greater transparency of who is doing what, what progress is being made and what remains to be done;
  c. increased collaboration between public programmes and between public and private investors in areas of mutual benefit.
  d. a lean delivery process that utilises and builds on the best of what we have already.
How to deliver on the promise of MI?

- This is now the focus for the Mission Innovation partners.
- Lots of past experience to draw upon – positive and negative.
- UK been looking closely this.
- Some key insights:
  - Be clear on and get buy-in to objectives up front.
  - Pay attention to the incentives for all parties.
  - Focus – on activities where collaboration can bring maximum impact.
  - Know when to stop.

Thanks for your attention.

Carbon Trust’s ‘United Innovations’ report
Looks at how to achieve cost-competitive clean energy through global collaboration. Concludes that through innovation:

“The world could save an estimated US$550 billion on the cost of deploying clean energy technologies over the next decade”