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# DFID's energy policy – approach and future directions

*ICED Quarterly Lessons Learned series*

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# The Energy Policy Framework (from Oct 2015)

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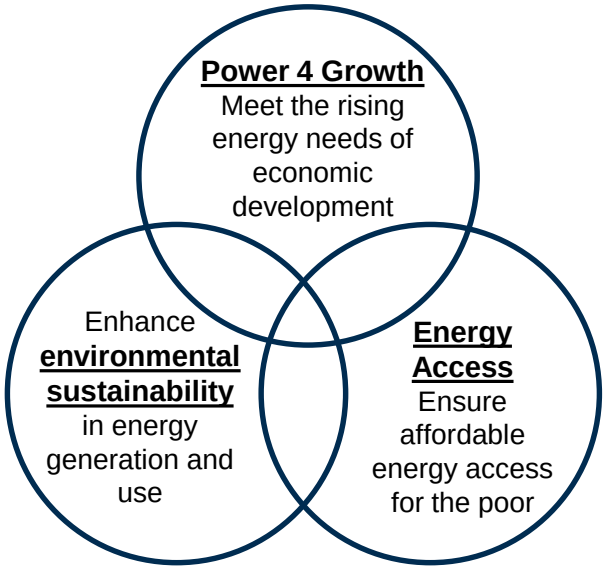
**1** *Three inter-linked objectives…*




**2** *…with priority actions reflecting our comparative advantages…*

**3** *…delivered through a mix of approaches depending on context…*

| | On-grid | Mini-grid | Off-grid |
|---|---|---|---|
| TA to public sector | | | |
| TA and capital for start ups/ R&D | | | |
| Investment | | | |
| International influencing | | | |

**4** *…supported by 5 policy positions*

1. Focus on **poverty reduction** and **female economic empowerment**
2. Ensure investments meet **environmental and social safeguards**
3. Help countries adopt **climate smart development** pathways; encourage a focus on investment in **cleaner energy** technologies
4. No **financing for coal-fired generation** except in rare circumstances in the world's poorest countries
5. Support initiatives to **phase out fossil fuel subsidies**; advise low-income countries on long-term opportunities, risks and vulnerabilities of **upstream extraction of fossil fuels**

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# What has changed?

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- Falling costs of renewables
- Innovation in business models to deliver renewable energy through grid-based and decentralised energy
- Growing need to catalyse private finance
- Deteriorating public finances in DFID focus countries
- Growing interest of donors in providing energy assistance (crowded space)

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# The Whole System Approach (Oct 2017)

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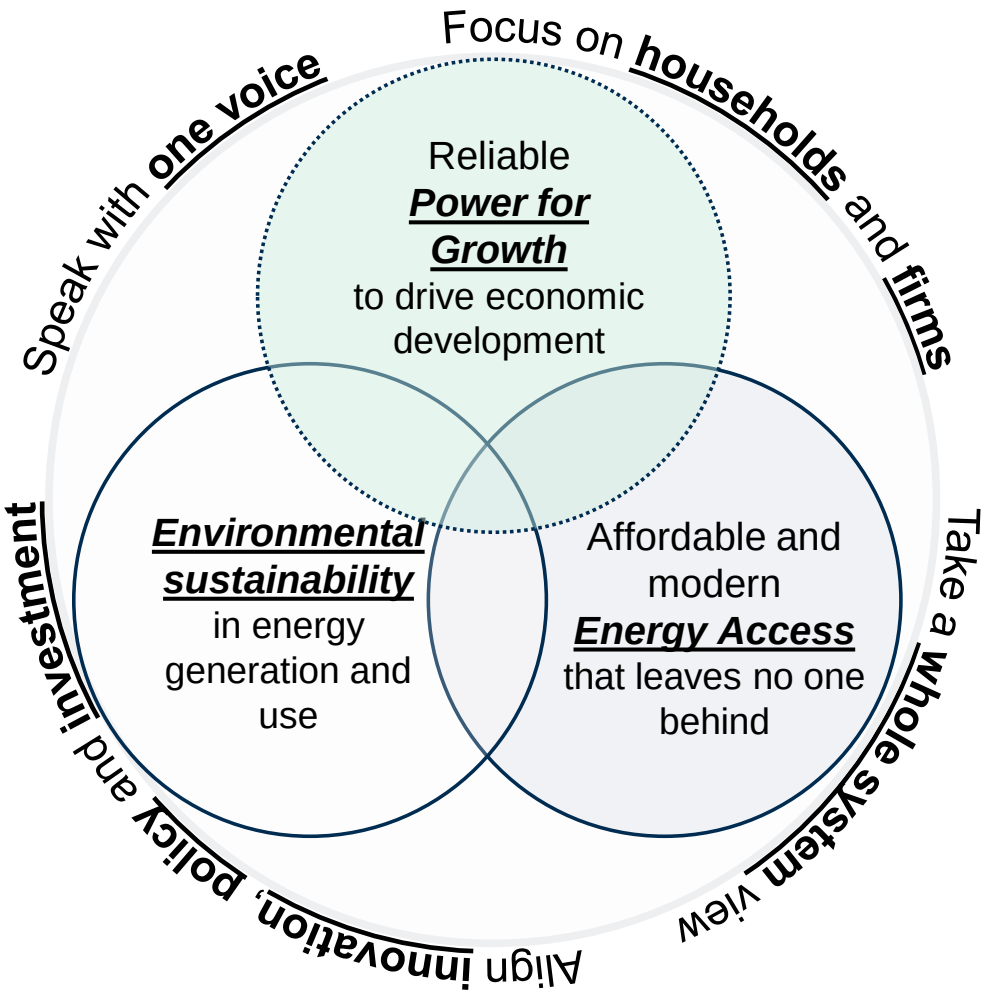

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# Next steps for DFID's energy policy

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- Continue to develop policy by:
  - Collect feedback on 4-page Energy Narrative setting out four pillars of the WSA
  - Revisit objectives and principles of Energy Policy Framework, to set out clear vision aligned with WSA
  - Define the distinct offer on energy within spending teams, and their contribution to overall DFID vision on energy
- Further operationalise WSA through:
  - Designing diagnostic based on WSA for programme design
  - Energy sector planning initiative and research on alignment between climate and energy plans
  - CEOFF paper on energy
  - New Input Sector Codes and portfolio mapping
  - And others … work plan TBD

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# The ESMAP Knowledge Exchange Forum on Strengthening Energy Systems

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- How do we strengthen coordination across donors, including on critical aspects such as energy sector planning to unlock investment?
- Do we have the balance right between market-based approaches and support to ailing utilities?
- How to ensure energy services reach the poor, esp. when market-based approaches have a tendency to leave people behind?
- How do we strengthen the financial viability of utilities, and the need for complementary investments e.g. in social protection

# Recent trends in utility-scale renewables

- Levelised costs of solar PV and onshore wind have fallen significantly since 2010
  - By ~60% for solar PV and ~20% for onshore wind
  - Global averages for utility-scale plants are within the cost range of fossil fuels
- IRENA expects global average levelised costs to fall further to 2025
  - By ~50% for solar PV and ~25% for onshore wind
- Costs in low income countries are higher than global averages
  - Due to small market scale and market immaturity, high financing costs, lack of competition, length and complexity of regulatory requirements, high transaction costs

# Recent trends continued

- Auction results have seen record-low bid prices in a number of countries
  - South Africa – solar PV at 74US$/MWh, onshore wind at 40US$/MWh
  - India – solar PV at 40US$/MWh, onshore wind at 52US$/MWh
  - Zambia (WB Scaling Solar) – solar PV at 60US$/MWh
- System level analysis
  - 30% 2030 demand of 10 SSA countries could be supplied at least cost by onshore wind and/or solar PV, without additional system investments (Berkley Lab Study)
- Barriers to scaling up
  - Technical – balancing and other integration costs
  - Commercial – liquidity, distribution
  - Governance – regulation, institutional capacity

# Key findings and implications

- Clear need to take a whole system view of costs, starting from demand, with explicit consideration of risk/uncertainty
  - This thinking should feed into long-term power sector planning
- A number of DFID partner countries are relatively well-placed to integrate variable renewables due to underdeveloped systems, low renewable penetration, varied renewable resources, flexible generation
- Supporting the early deployment of renewables can result in context-specific learning-driven cost reductions (IRENA)
  - WSA provides a framework to think about how DFID can approach this
- Given the need for system flexibility, donors could look ahead at what we can do to support emergence & use of smart system management tools (e.g. storage and demand-side management) in partner countries
  - Is this already happening?

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# ANNEX: Key pillars of the Whole System Approach

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# Our objectives

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- **Maximise impact of our work**, by focusing on the needs of the poor and firms who consume energy services;
- **Strengthen value for money**, by ensuring our interventions meet those needs and are joined up across DFID, HMG and with our implementing partners;
- **Provide better evidence and advice for governments** to make decisions on strategy, regulation and management to attract investment across their energy systems;
- **Increase investment in energy and related sectors**, by improving financial viability of utilities and providers of decentralised energy in developing countries;
- **Better leverage UK expertise** by working more closely with leading UK institutions;
- **Provide a clear, compelling UK story on clean energy for growth** to the public, and aligning our partners with this approach; and
- **Identify priority areas for interventions**, based on specific country contexts – targeting high impact bottlenecks

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# Pillar 1: Focusing on poor households and firms

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1. Deliver the **power** needed for productive activities that can help diversify economies

2. Be **flexible** wrt approaches and delivery models to specific country contexts (grid vs off-grid vs mini-grid)

3. Improve **energy efficiency** and **affordability**

4. Build markets for **renewable energy services** including clean cooking and transport services

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# Pillar 2: Taking a whole system view

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1. Support a **mix of generation technologies** and help countries integrate variable renewable generation

2. Provide 'politically smart' **support for reform** to improve the financial viability of energy systems

3. Promote **coherence between climate, industrial and energy** sector policy and planning

4. Promote **increased investment across the sector**, from generation to transmission and distribution

5. Focus on **interface between power and other sectors** (urban, manufacturing, commercial ag, transport)

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# Pillar 3: Align our innovation, technical assistance, policy and investment work

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1. Work closely with CDC, PIDG and others to scale up and **strengthen development impact** of investment

2. Use technical assistance and policy support to **unlock investment opportunities**

3. Support **better functioning markets** for energy, including Solar Home Systems

4. Support **scaling up of innovations** through policy support and grant finance for technology and research, development and demonstration

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# Pillar 4: Speaking with one voice

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1. **Step up coordination** across DFID, HMG and partners

2. Interventions tailored to **specific country and regional context** – including approaches of other actors

3. Explore **new ways of engaging** with partners

4. Continue to work with **international partnerships** like SEforALL to improve coherence and shared evidence for decision making