

Public-private roles and partnerships for innovation and technology transfer

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Synopsis

- Enormous energy-related challenges facing developing countries: expand energy sector; increase energy access; face the climate problem
 - ~\$200bn pa for 30 years is required to alleviate energy poverty in developing countries without greatly increasing carbon emissions
 - Need technology innovation that is shaped by local needs and rooted in local context to meet these challenges but sparse support in global initiatives for innovation
 - A network of Innovation Centres based on public-private partnerships can help advance developing-country-relevant technology innovation and capacity-building
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The Carbon Trust accelerates the move to a low-carbon economy



- Independent company set up in 2001 by UK Government
- Aligns private sector interests with public sector objectives
- Focussed on carbon savings, now and in the future, and private sector leverage of public funds

Insights

Explaining the low-carbon economy



Solutions

Delivering carbon savings for organisations



Innovations

Developing new low-carbon technologies



Enterprises

Creating new low-carbon businesses

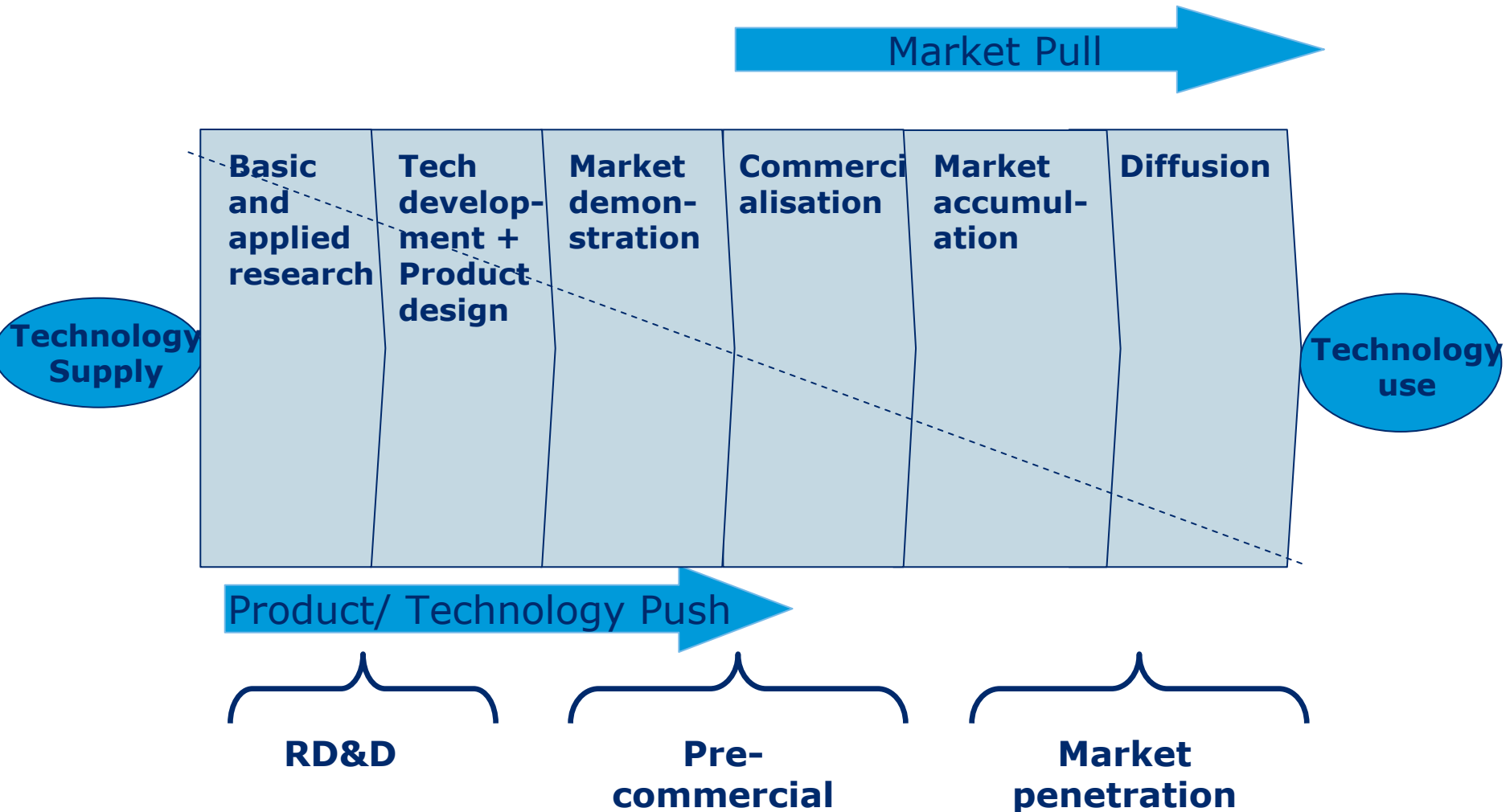


Investments

Financing low-carbon businesses

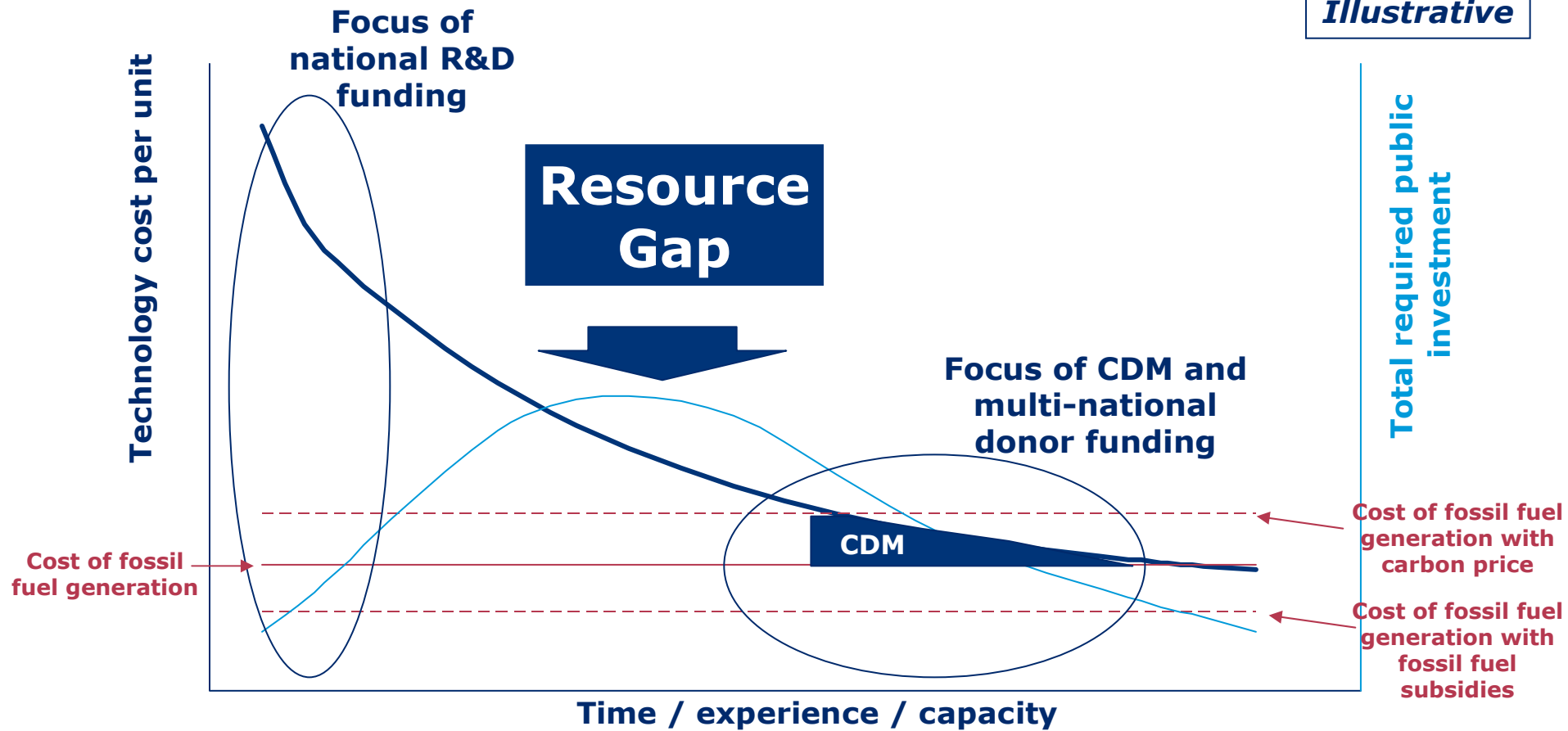


“Technology push” and “market pull” key ingredients of successful technology innovation



A resource gap prevents low carbon technology deployment, at scale

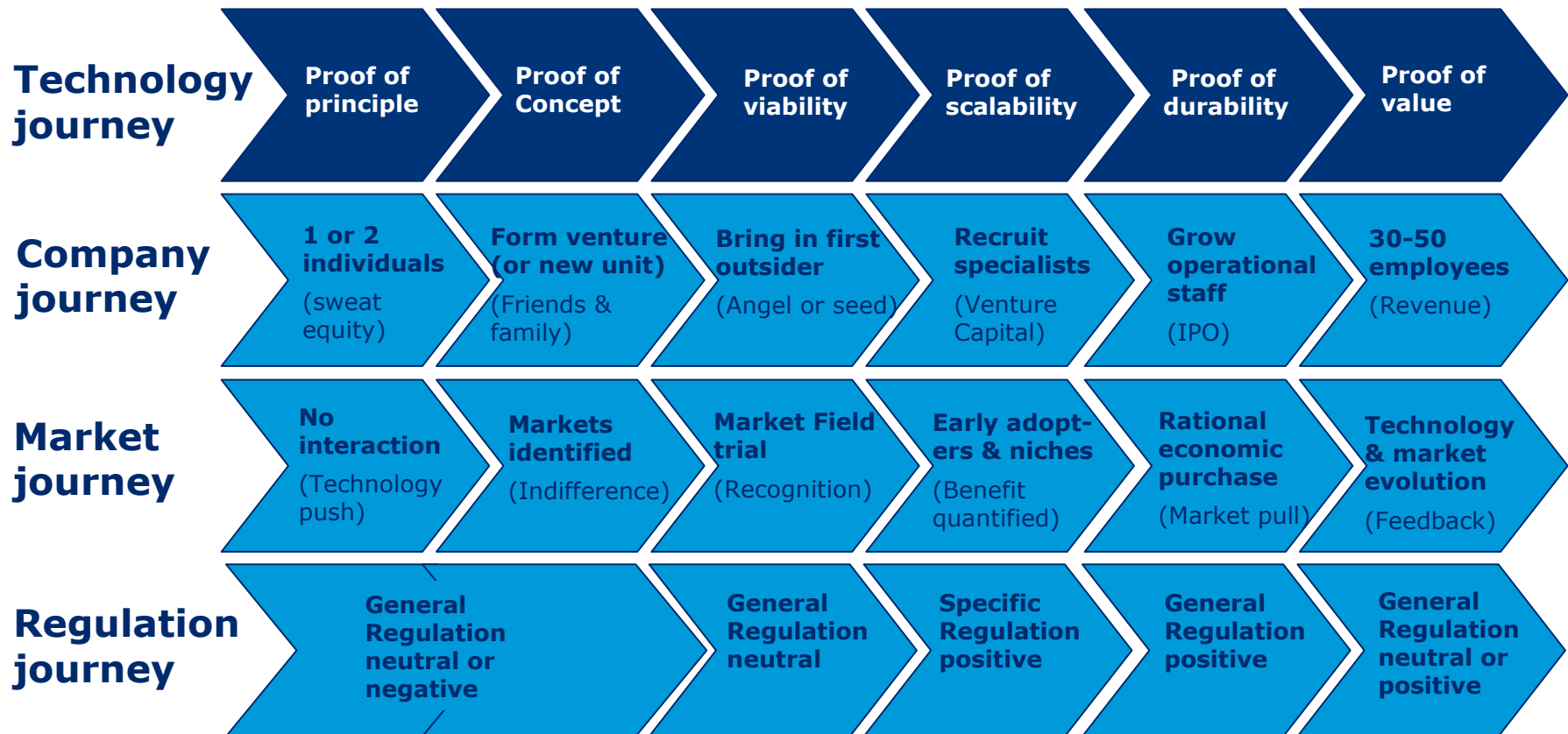
Illustrative



Increasingly attractive to private investors 

Support is required to overcome barriers along the innovation journey

- Innovation: Moving from concept to commercial product availability by overcoming the diverse range of technology, business, market and regulatory barriers



A network of low carbon innovation centres can help meet multiple climate and development goals

- Accelerate the transition to low-carbon development;
- advance sustainable development while making a positive contribution to climate mitigation in developing countries by enabling the development of technologies that serve the unmet energy needs of developing countries, especially for the energy poor; and
- support climate adaptation programs by developing technologies that are suitable for specific countries.


A network of low carbon innovation centres can accelerate the transition to low-carbon development

- Public-private, North-South, and South-South partnerships to
 - advance the development and adoption of suitable energy and climate technologies (i.e., support “technology-push”)
 - underpin the creation and development of markets (i.e., support “demand-pull) move technologies up the adoption curve
 - carry out other enabling activities such as helping create a favourable national political and regulatory framework
 - build local capacity (technical, financial and institutional) in the low carbon / clean energy markets

All this to take place at scale – and faster and better than would otherwise occur

Key activities for innovation centres

- Research and Technology Acceleration: proactively address identified technology gaps and barriers
- Support enterprises: support early stage businesses and catalyse commercial investment in low-carbon businesses
- Delivery models and support: overcome lack of 'traditional markets' and information, financial barriers to catalyse deployment
- Skills capacity building: create local capability in technical and business skills
- Policy & market analysis: support regulatory and policy development



Address barriers and de-risk private sector investment

Success factors for Innovation Centres

- Funding, goals and governance:
 - Agreed goals, terms of donor support and success criteria;
 - Appropriate local control of problem definition and project prioritisation and local ownership of the solution
 - Sufficient funding certainty and time horizon to allow planning and implementation of complex projects;
 - Sufficient public funding to undertake pre-commercial activities.
- Activities and approach:
 - Independent viewpoint, but collaborative Government;
 - Leveraged private sector funding;
 - Project prioritisation process (CO₂ and economic potential);
 - Full spectrum of activity from R&D to deployment (tailored to local needs) – the centre acting as a focal point for low carbon activity and knowledge sharing.

We need not just 'technology transfer' or R&D, but a well-functioning innovation chain

Must put in place a sustainable model with local finance and expertise to address local energy needs and in the long-run create a technologically-dynamic system.