The finance gap challenge: ideas for mobilizing opportunities for clean energy growth

Session 4: The role of climate change adaptation and mitigation in economic growth

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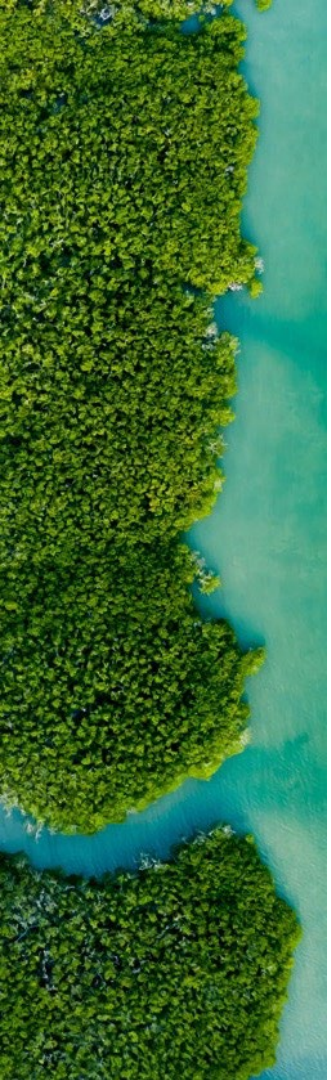
Environmental Defense Fund

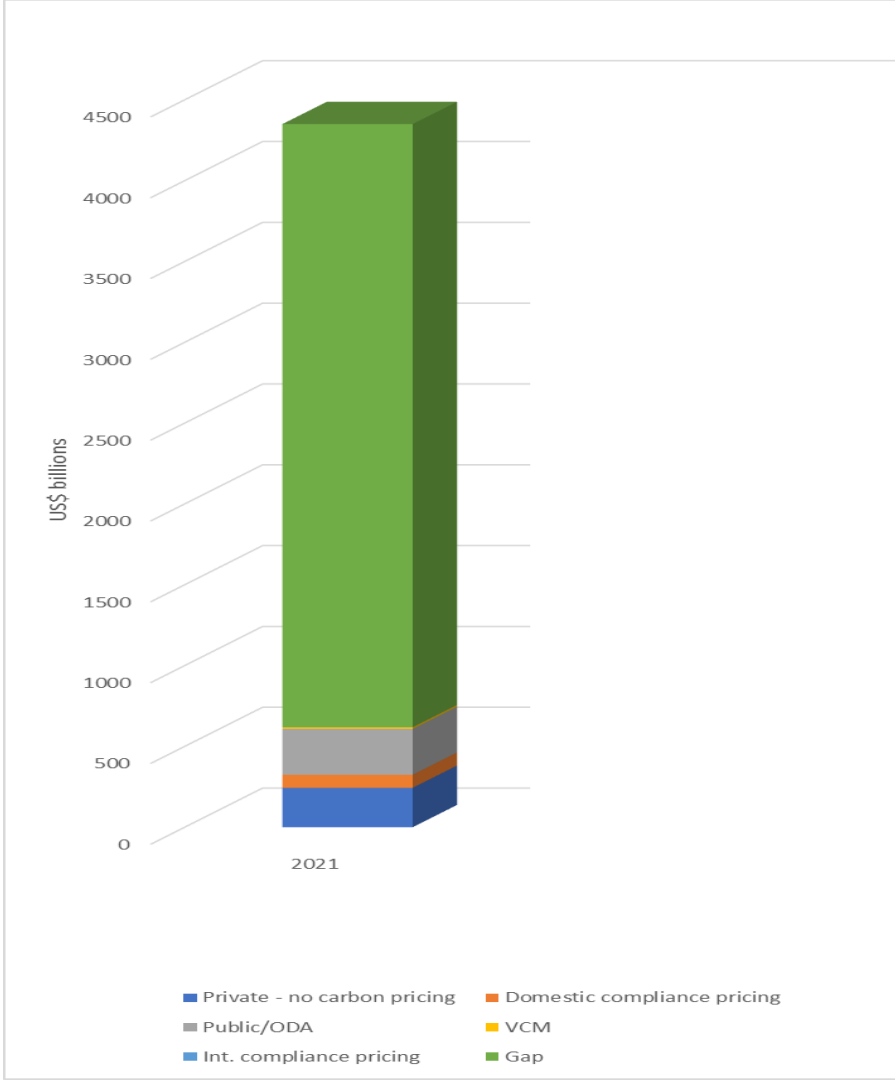


Total finance needed for clean transition annually by 2030

– 4.3 trillion

Finance gap in 2021

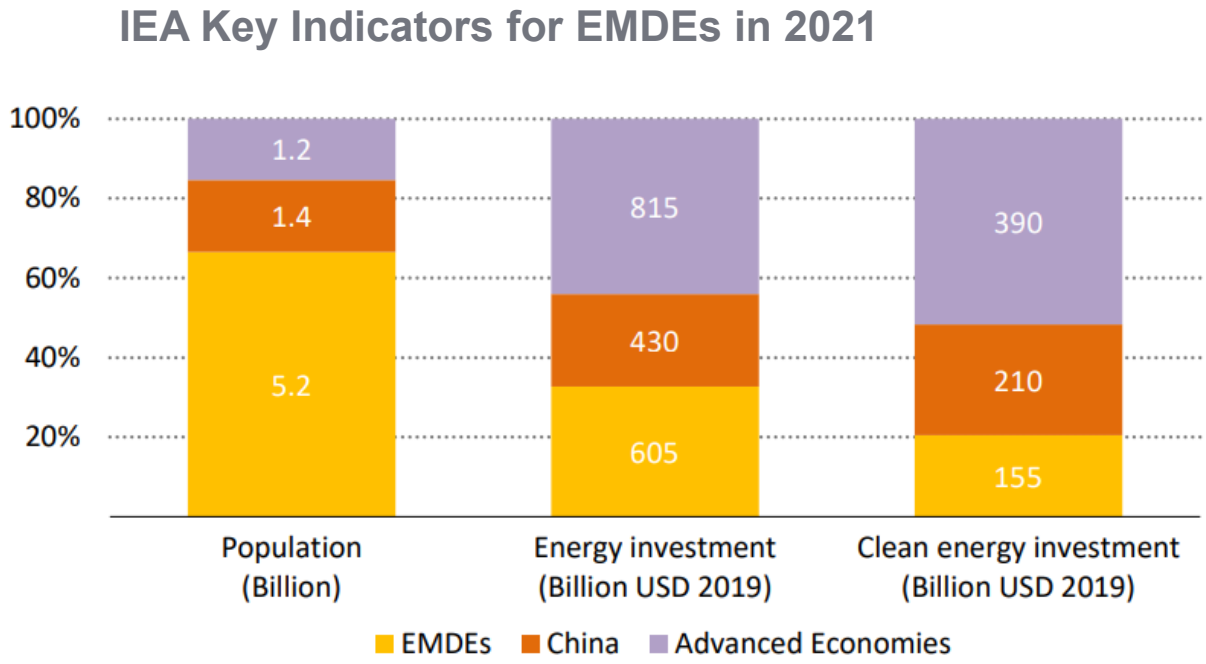
– 3.7 trillion



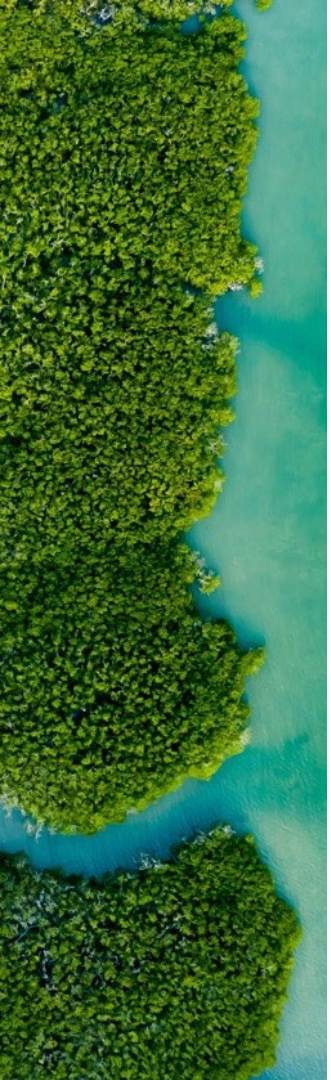
- Fossil fuel subsidies
- Technology cost reduction for renewables
- Policy support for transport
- Agriculture, forestry, land use, industry, water all lagging
- Concessional and grant funding limited
- Developing country investment lagging

Not enough clean energy investment where it counts

Emerging market and developing economies account for 2/3 of world's population but only 20% of global clean energy investment

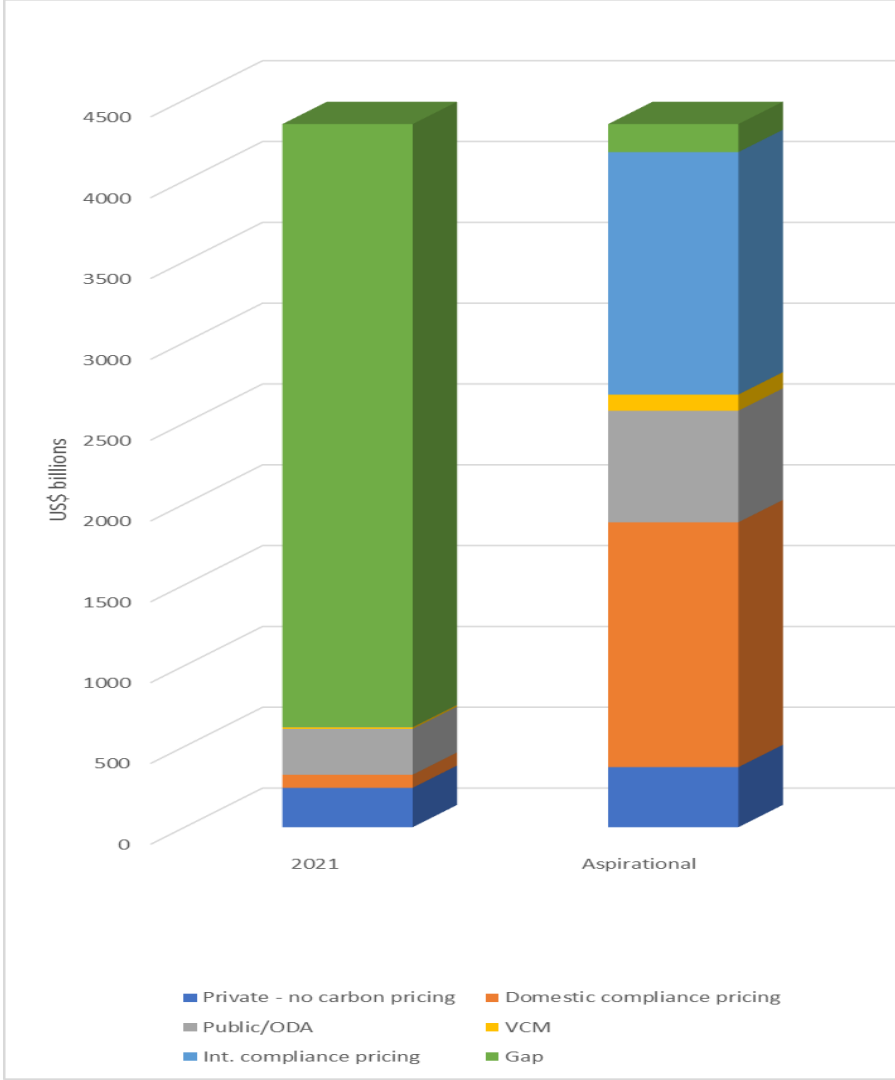


Source: *IEA World Energy Investment 2021 Special Report*



International transfers for mitigation under Art. 6, CORSIA and VCM should play a major role in mobilizing investment - Complementing public funding

Domestic compliance pricing – broader than carbon tax - should also (some overlap among drivers of capital)



3 key actions needed – Climate Policy Initiative

1. Adopt holistic sectoral strategies
2. Shift to a new finance paradigm

   Coordinate public and private actors and innovative financial mechanisms
3. Policies to create enabling environments for private finance mobilization

   Coordinated set of actions and decisions: reducing technology costs, promoting innovation, scaling proven technologies, creating predictable environments that accelerate net zero transition

New Zealand experience

High incomes and growing population and economy

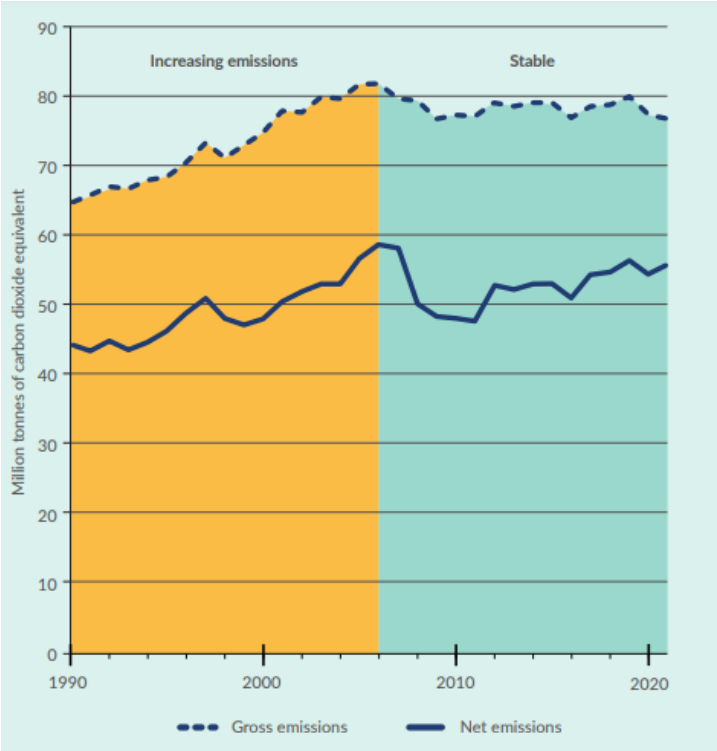
First Treasury report on emission pricing in 1995

ETS law passed 2008

Weak prices until 2016

Climate Change Commission 2019

- pathways modeling

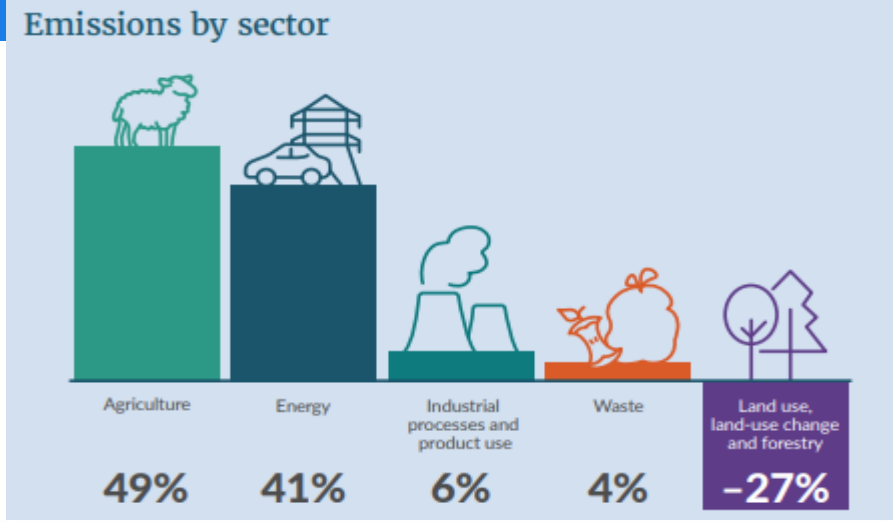


Future challenges

Mostly difficult-to-abate sectors so progress slow on gross emissions

- Transport is key – 20% new sales electric at end of 2022 and rising fast

Rapid land-use change creating concern



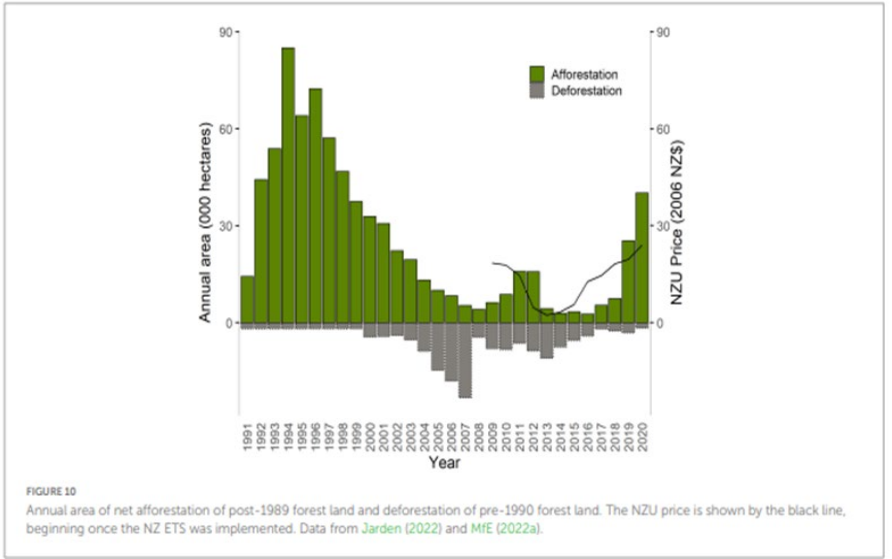


FIGURE 10
Annual area of net afforestation of post-1989 forest land and deforestation of pre-1990 forest land. The NZU price is shown by the black line, beginning once the NZ ETS was implemented. Data from Jarden (2022) and MfE (2022a).

Climate investments and carbon prices

Investment environment still unstable

Government investments in infrastructure threatened by covid impact and climate disasters

Need to purchase around 100m tons ITMOs for Paris compliance

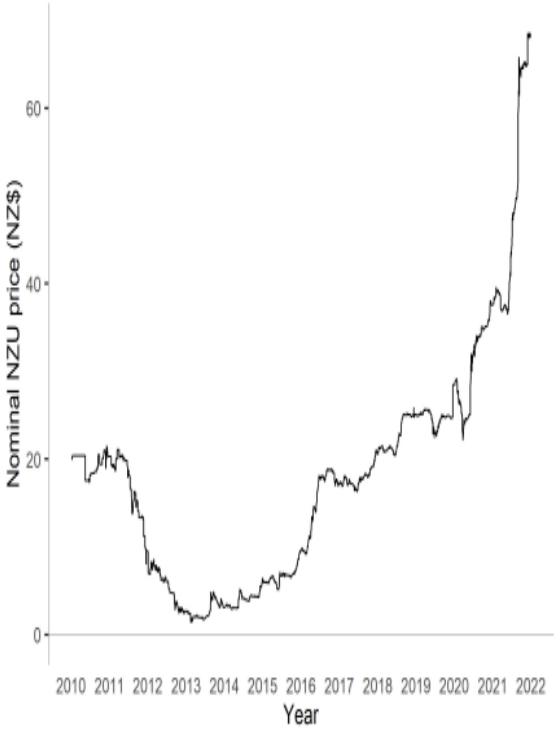


FIGURE 1

Evolution of NZU prices, 2009–2021. Data from Jarden (2022); used with permission.

Holistic sectoral strategies

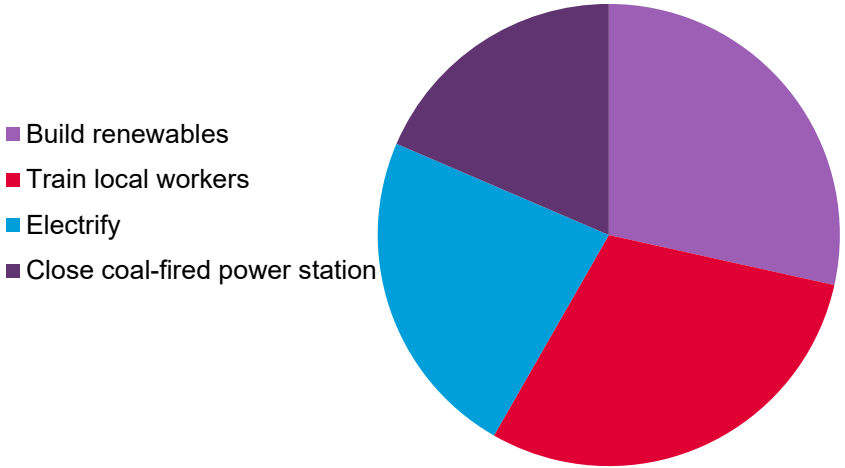
Vision at economy / society scale – modeling, buy-in

Trust and strong contracts to transfer cash, capital and capability

Mitigation avocados: seed, flesh and skin

- Incentives and resources needed at each scale
- Integrity for the climate from large scale

The seeds: Facility scale opportunities, incentives and needs



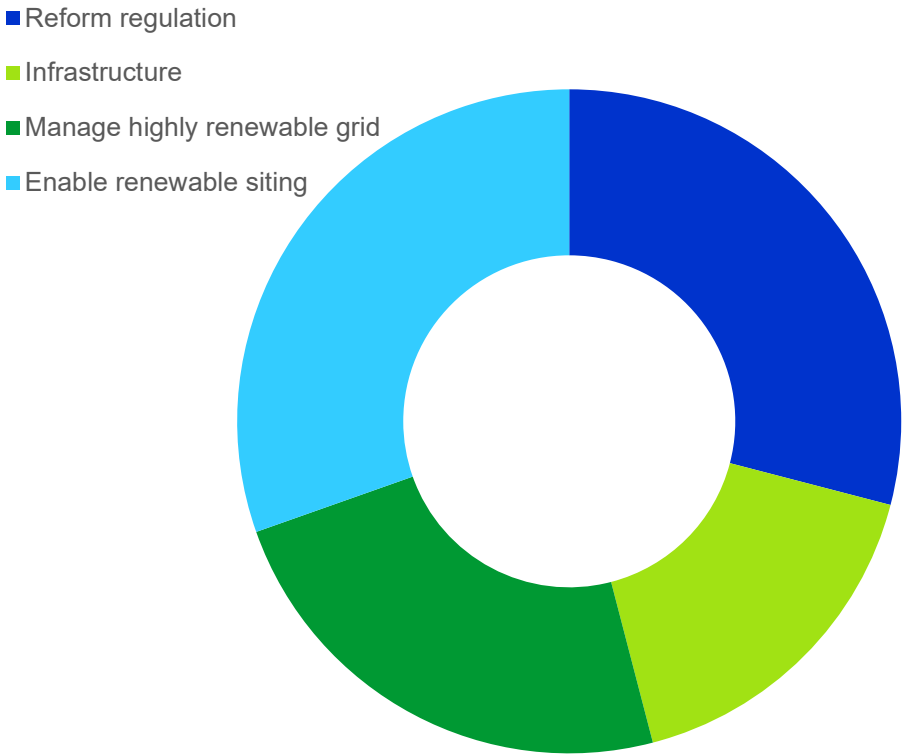
Local incentives

- Co-benefits – air quality
- Concessional credit - JETP
- Rewards: pricing of renewable electricity, carbon credit projects
- Avoid costs: ETS, regulation

Local resources needed

- Access to finance
- Enhanced grid infrastructure
- Human capability – construction and management of renewable system

Nourish the seeds: Sectoral scale opportunities, incentives and needs



sectoral / uurisdictional incentives

- Co-benefits
- Achieve NDC / regional goals
- Results-based climate finance, VCM or Article 6

Sectoral / Jurisdictional resource needs

- Just Transition
- Funds to cover policy costs
- Capital to lend locally and build infrastructure
- Capability for effective policy design and implementation

An electricity sector avocado

layers of complementary actions to transform the system
‘Stack’ capital and revenue sources to fund holistic change

Implications for developing country economies

Challenges from an accelerated energy transition

- Risks from additional public debt
- Challenges in infrastructure siting
- Risks for energy reliability during transition to high renewables grid
- Challenges for just transition – loss of jobs with specific skills in specific places
- Strong vested interests in existing assets

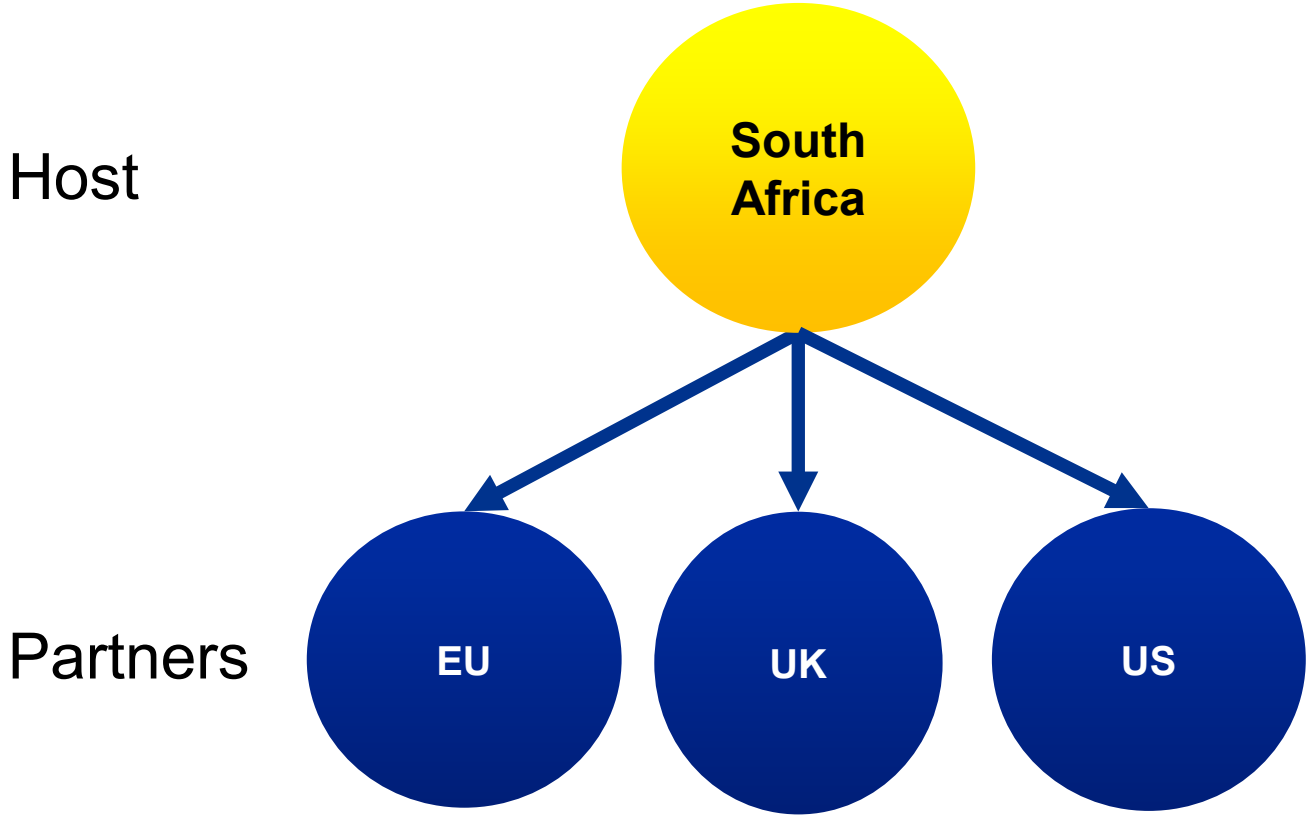
Implications for developing country economies

Opportunities for access to resources to accelerate expansion and enhancement of energy access leading to enhanced economic growth

- Access to finance – for private investments as well as public
- De-risking
- Concessional rates
- Additional revenue streams for clean investments to raise profitability
- Technical support
- Worker training, new clean jobs
- Reduced air pollution and worker hazards

Increase chances that we avoid the worst impacts of climate change.

Climate Action Teams (CATs): working together to accelerate mitigation



Climate Action Teams initiative: contract design goals

Provide resources and rewards for host country governments who support transformational change

Create a more attractive environment for ambitious clean investment

- for companies acting locally and international investors

Help to coordinate host and partner actions that together can transform

Act together to pool skills and share risk

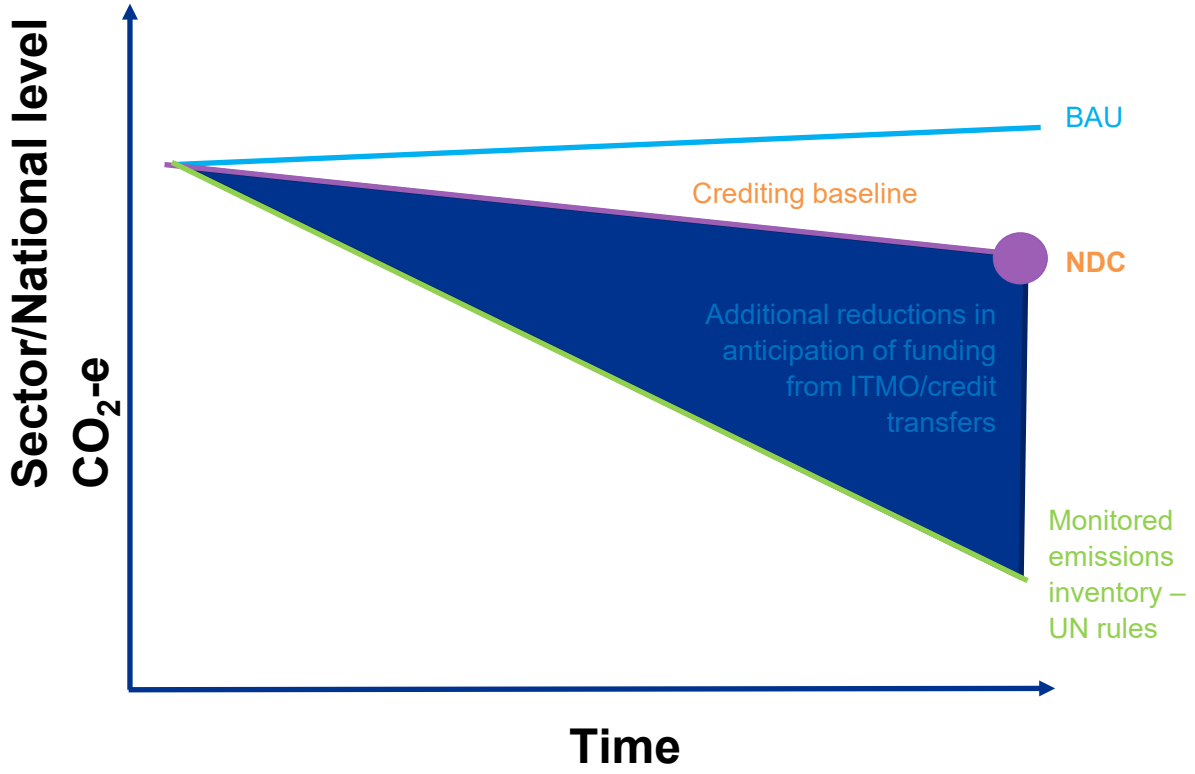
Reduce global emissions faster and in a more equitable way

Climate ActionTeams Initiative: key features

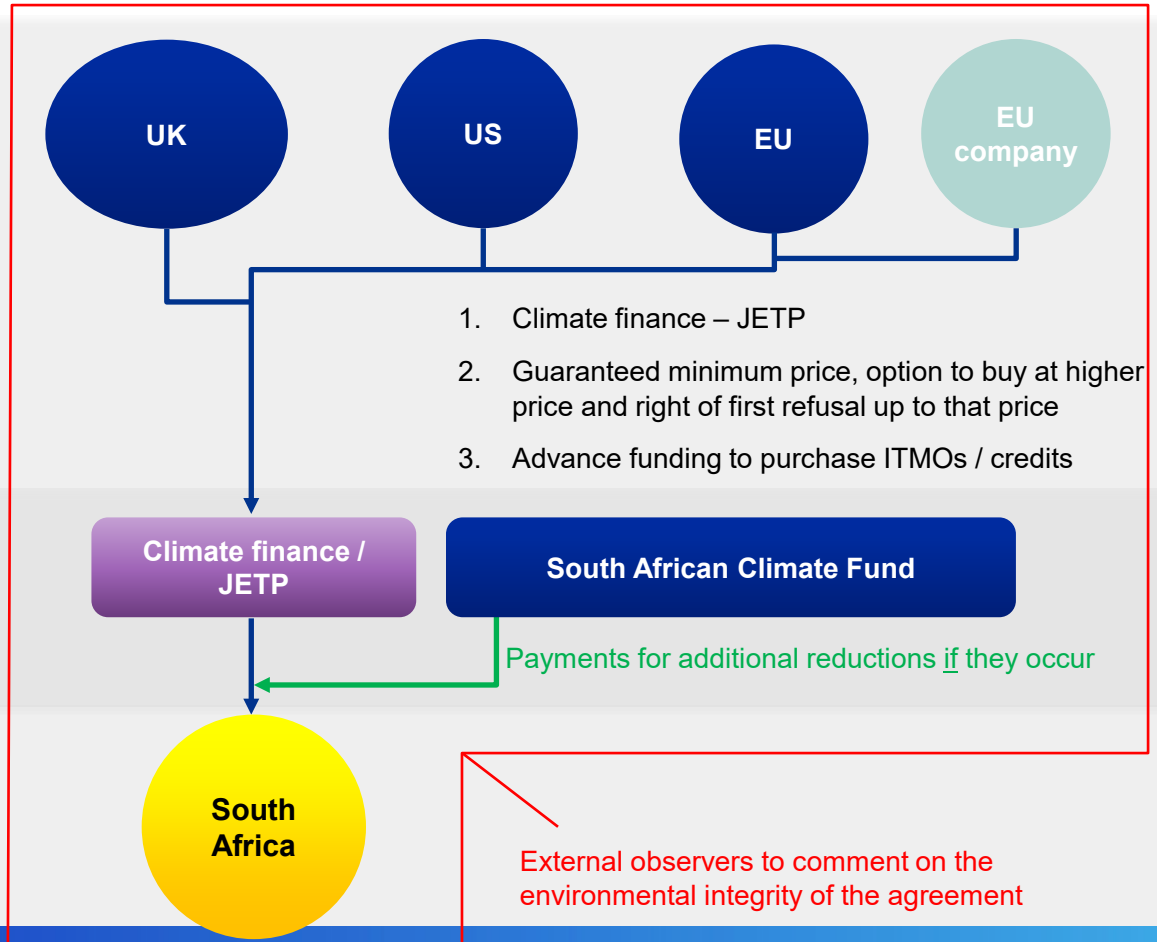
1. Results-based
2. Large scale
    1. National - Multi-sectoral
    2. Long term

    Supports any actions and policies needed for transformational change
3. Multiple partner countries who pool demand and technical support
4. Strong relationships supported by institutions– not just commercial
5. Develop in collaboration with investor community to mobilize clean investment

Creating Internationally tradable mitigation outcomes (ITMOs) or credits from sector/economy-wide transformation



What is a ‘Climate Action Team’?



Key thoughts to take away

1. Use all sources and instruments to fill the climate finance gap and realise the huge potential opportunity for development and climate
   public, private, carbon markets, philanthropy
2. Apply a holistic approach to transition
   pricing, planning, institutional, just transition
3. International support for local and system/sector level
   'Mitigation avocado' – practical projects with improved investment environment and integrity from change observed at the system level
4. Leadership from the 'south'
   design Paris / VCM contracts that bring resources, manage risks and have integrity