



Global Power Sector Transformation

How does change happen? A philanthropic view

JISEA 2015 Annual Meeting

Sonia Medina, Director, Climate Change, The Children's Investment Fund Foundation

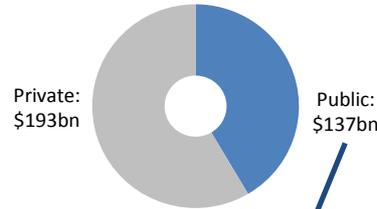
11th March 2015

Philanthropy is a drop in the ocean of overall climate finance, and so must play a catalytic role

Total global climate finance: \$331bn in 2013

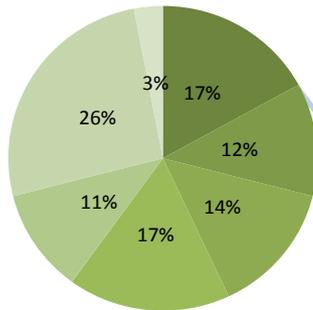
- At \$0.3bn, the large climate philanthropies comprising the Funders Table are a rounding error! (<0.1% of total climate finance).
- Cross-border flows make up 50% of public climate finance, but only 10% of private renewable energy finance.

Private climate finance is poorly understood – the figures here include renewable energy investment only.



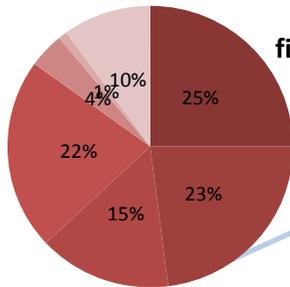
Public climate finance has better data available. Bilateral and multilateral finance is concentrated in renewable energy and energy efficiency. Africa and South and Central Asia receive most bilateral climate finance, while Eastern Europe and Central Asia receive most multilateral climate finance.

- EU
- Latin America
- Africa and Middle East
- East Asia and Pacific
- South Asia
- Non EU Europe and Central Asia
- Regional



by region

- Renewable energy
- Energy efficiency
- Other energy
- Transport
- Land Use
- Waste and water
- Cross cutting



by sector

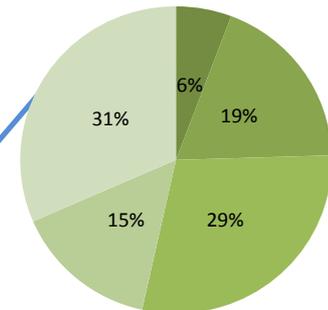
Multilateral DB climate finance: \$19bn

PUBLIC CLIMATE FINANCE: \$137bn

Bilateral climate finance: \$14bn

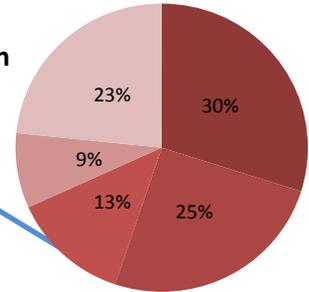
- Bilateral figures from OECD DAC include the full value of interventions tagged with climate change mitigation both as a 'principal' and as a 'significant' objective.
- Multilateral Development Banks – a group comprising AfDB, ADB, EBRD, EIB, IDB, WB and IFC – figures identify the climate component of projects only.
- Other multilateral flows include other regional development banks and the EIB financing for 'old' EU member states.
- Other public climate finance sources comprise direct public contributions from government agencies and ministries and national and multilateral climate funds.
- CPI estimate that an additional \$60bn of domestic climate finance is provided by government budgets (not included here).

- Europe
- Latin America
- Africa and Middle East
- East Asia and Pacific
- South and Central Asia



by region

- Transport and storage
- Energy generation and supply
- General environmental protection
- Land use
- Other



by sector

CIFF's Climate Change Strategy aims to accelerate high value decarbonisation by supporting and replicating large-scale leadership efforts

Mission:

- Recognising that children living in poverty in developing countries have the greatest vulnerability to climate change, CIFF aims to accelerate high value decarbonisation by supporting and replicating large-scale leadership efforts.

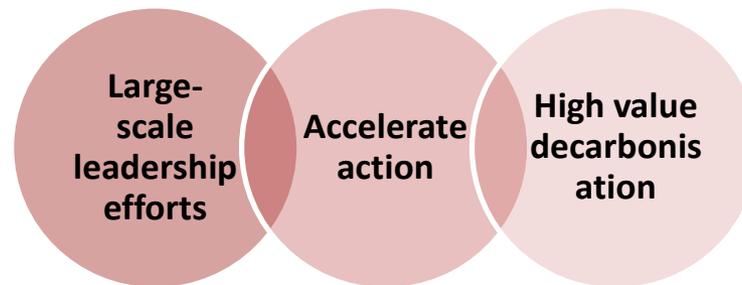
Purpose:

- Demonstrate that **ambition** in tackling climate change is politically and economically feasible and desirable.

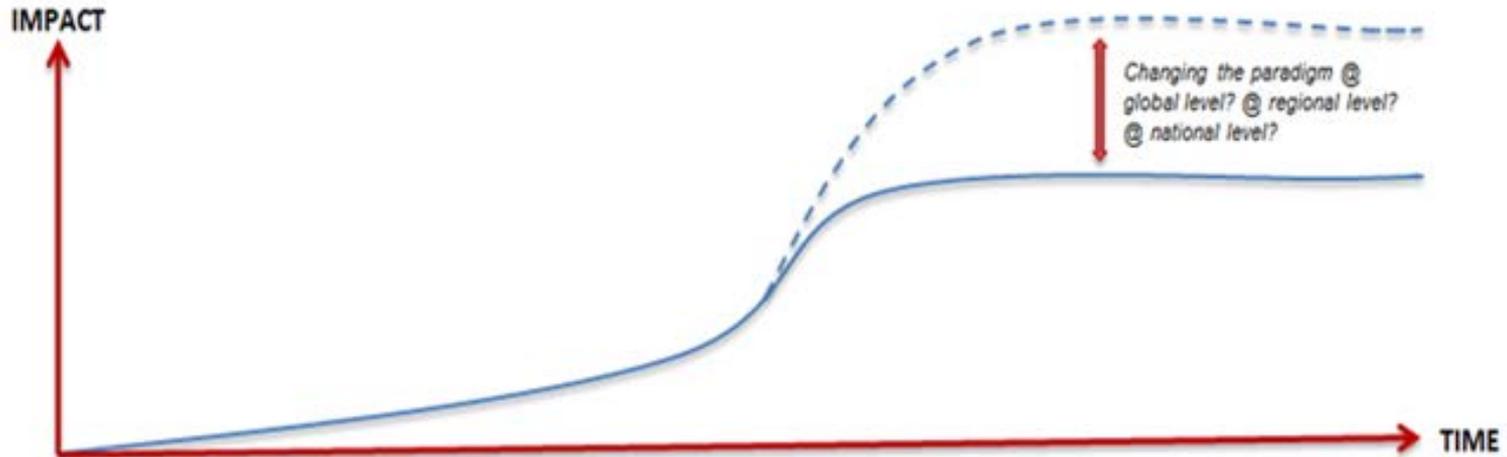
Approach:

CIFF's focus on ambition implies the following:

- We are not seeking incremental improvements, we are seeking **systems change**
- We start by **backcasting** from where we need to be in 2050, not by forecasting from where we are today, so that we can escape inertia and change trajectory
- We have a **high appetite risk** where we think we can deliver transformational impact



Transformational change requires interventions throughout the value chain:



- Primary research-development of a product
- Developing the evidence base for an approach

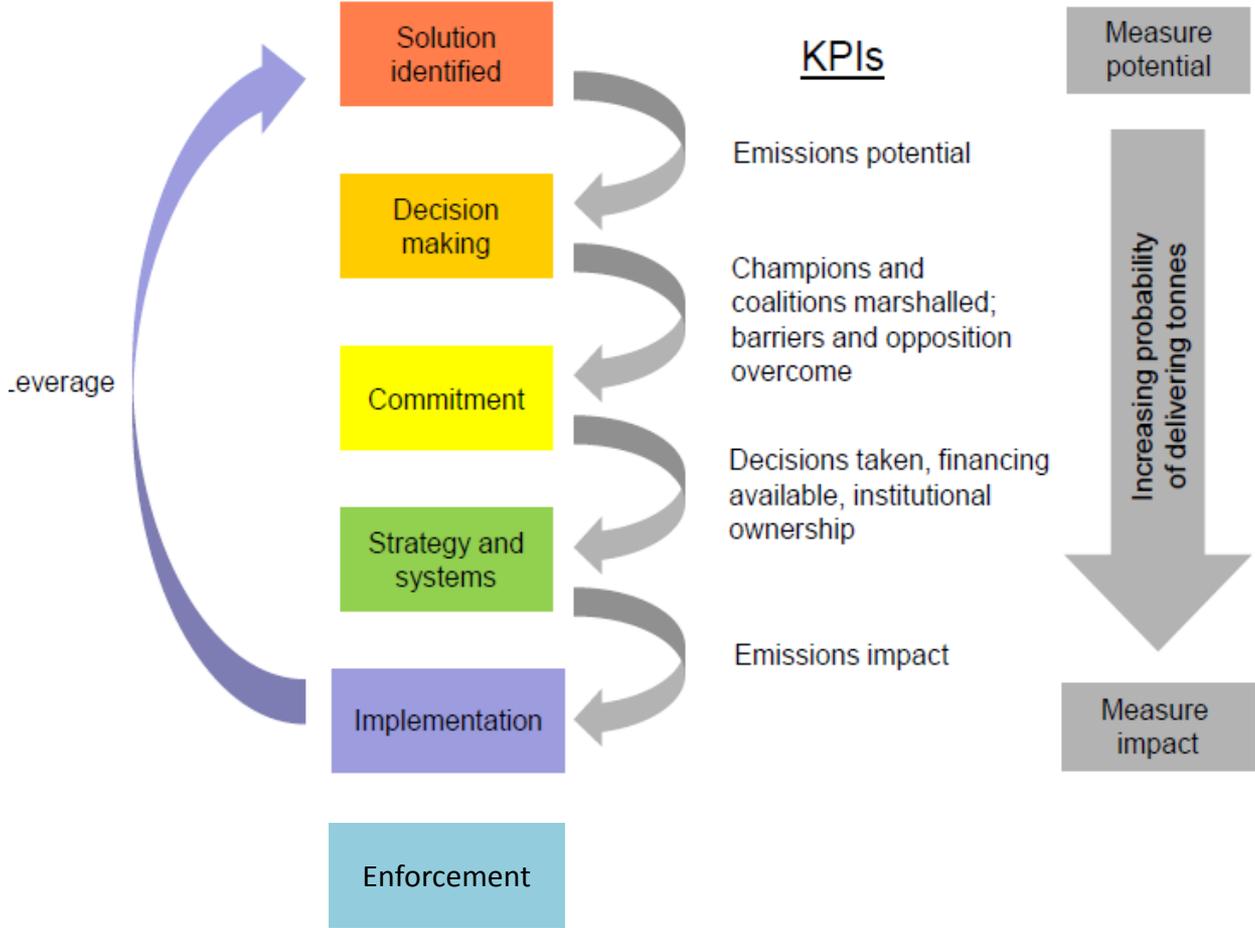
- Piloting an evidence-based approach or product at a small scale

- Operationalising a tested model to scale at sub-national or national level within a particular cultural, political and institutional context
- Cost-effective delivery at scale

- Legislative/regulatory framework and/ or policy in place and self sustaining financial model in place at national, regional or global level.
- Capacity building
- Systems strengthening

- CIFF considers a solution sustainable when an approach or systemic change is maintained at a certain financial level with continued political commitment over x years beyond the investment.

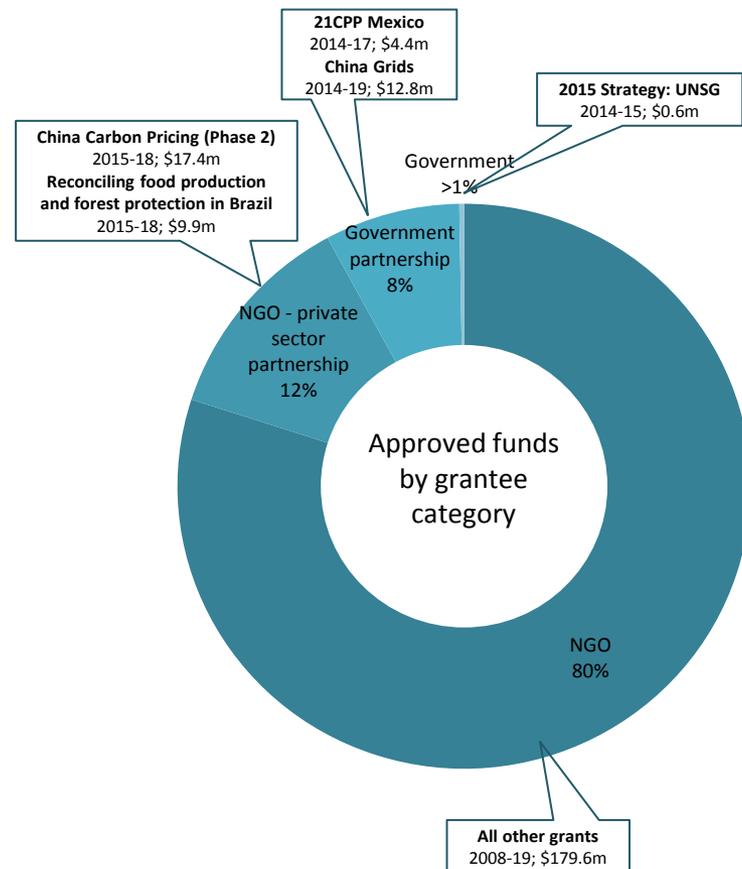
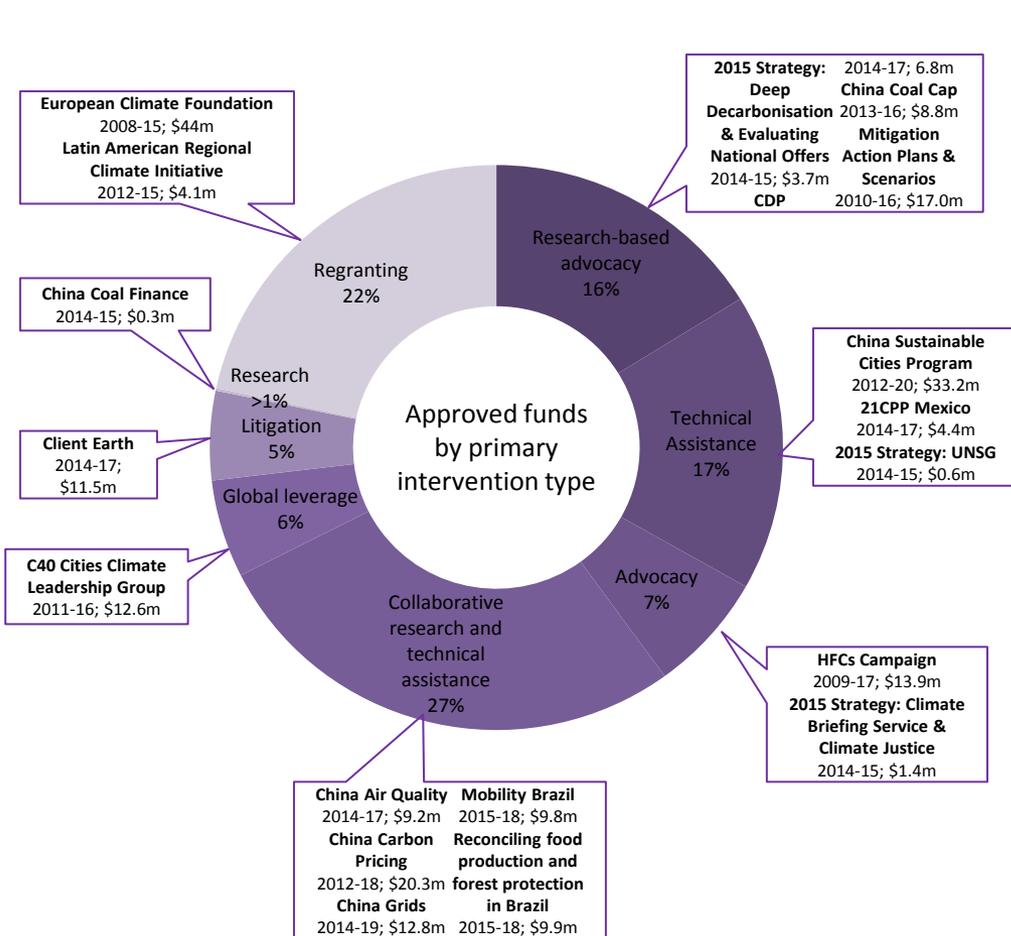
Transformational change requires interventions throughout the policy-making process:



A snapshot of CIFFs Energy Transformation strategy & portfolio:

Vision	<ul style="list-style-type: none"> A world in which the power sector is zero-emissions in developed countries by 2030 and in developing countries by 2050. Power generation is coal-free globally by 2030. 																
Transformational Goal	<ul style="list-style-type: none"> By 2020, the world has locked-in a pathway to deliver a zero-emissions power sector by 2030 in Europe and in China and Latin America by 2050, with implementation on track through the UNFCCC international process and domestically in China, Europe and Latin America (representing at least three quarters of global emissions by 2030) By 2020, the cost and availability of clean power alternatives (both financially and technologically) is sufficient to enable a cost-effective zero-emissions power sector 																
Objectives	<p>To increase political ambition through low carbon scenario and economic narrative and stakeholder engagement</p>	<p>To develop and strengthen the regulatory framework to decarbonise the power sector through carbon pricing, high-penetration renewables and anti-dirty strategies</p>	<p>To accelerate business and investor confidence in low carbon technologies through partnerships between public and private sectors and the exposure of risk in high-carbon investments</p>														
Portfolio	<table border="1"> <tr> <td colspan="3" style="background-color: #4CAF50; color: white; text-align: center;">European Climate Foundation (ECF) – Core + Core-programmatic</td> </tr> <tr> <td style="background-color: #4CAF50; color: white; text-align: center;">Mitigation Action Planning Scenarios (MAPS)</td> <td style="background-color: #4CAF50; color: white; text-align: center;">China Carbon Pricing – Phase 1</td> <td style="background-color: #4CAF50; color: white; text-align: center;">Valuing corporate carbon Phase 1</td> </tr> <tr> <td style="background-color: #4CAF50; color: white; text-align: center;">Latin America Regional Climate Initiative (LARCI) - Mexico</td> <td style="background-color: #4CAF50; color: white; text-align: center;">China Coal Cap</td> <td style="background-color: #4CAF50; color: white; text-align: center;">China coal financial flows mapping</td> </tr> <tr> <td rowspan="2" style="background-color: #4CAF50; color: white; vertical-align: top;"> 2015 Umbrella Investments: <ul style="list-style-type: none"> UN Secretary General support Deep Decarbonization Pathways Evaluating national offers Climate Briefing Service Mary Robinson Foundation for Climate Justice HFC goal into UNSG </td> <td style="background-color: #4CAF50; color: white; text-align: center;">21st Century Power Partnership Mexico</td> <td style="background-color: #4CAF50; color: white; text-align: center;">Strategic litigation in Europe</td> </tr> <tr> <td style="border: 1px dashed gray; background-color: #4CAF50; color: white; text-align: center;">China grids</td> <td></td> </tr> </table>			European Climate Foundation (ECF) – Core + Core-programmatic			Mitigation Action Planning Scenarios (MAPS)	China Carbon Pricing – Phase 1	Valuing corporate carbon Phase 1	Latin America Regional Climate Initiative (LARCI) - Mexico	China Coal Cap	China coal financial flows mapping	2015 Umbrella Investments: <ul style="list-style-type: none"> UN Secretary General support Deep Decarbonization Pathways Evaluating national offers Climate Briefing Service Mary Robinson Foundation for Climate Justice HFC goal into UNSG 	21st Century Power Partnership Mexico	Strategic litigation in Europe	China grids	
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CIFF's climate programme has primarily funded **technical assistance and research-based advocacy with NGOs**



Recent investments have increasingly emphasised 'actionist' interventions and partnerships with government and the private sector

Example: Boosting renewable energy production as part of China's energy revolution

National Renewable Energy Laboratory (NREL) and China National Renewable Energy Centre (CNREC),

2015-2019

2020-2035

Activities & Key Outputs

Outcomes

Strengthen Chinese modelling capacity (software & modellers) to conduct and provide robust analysis.

Int'l expertise

By 2019, CREAM model updated, modellers' capacity strengthened.
Evidence generated.

Modelling results, analysis, CREO etc.

Build & strengthen government & industry allies by closely engaging them in the research process & using evidence generated.

Governance structure & informal direct access

By 2019, ministries including NEA, NDRC, State Council **consistently articulating and promoting a green western expansion strategy.**

Consistent messaging & pressure from top leaders and ministries

Obtain buy-in of State Grid & SOEs by closely engaging them in the research process & using evidence generated.

Governance structure & informal direct access

By 2019, State Grid & big energy-consuming SOEs **not resistant to an alternative, green western expansion strategy.**

Direct programme impact:

- For the 14th Five Year Plan (2021-2025),
- A green western expansion strategy is embedded;
- An alternative, flexible, operable grid plan which prioritises renewable energy is included;
- Long-term (2050), mandatory renewable energy targets are included.

Long-term/ultimate impact:

- Curbing the rise in energy-related CO2 emissions by 2035;
- Achieve decoupling of emissions and economic growth.