SEIZING OPPORTUNITIES IN GREEN SHIPPING IN ASIA AND THE PACIFIC

Manila, 16-17 May 2023

Support for Green Infrastructure

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GREEN CLIMATE FUND

01

Set up by the UNFCCC, and serving the Paris Agreement

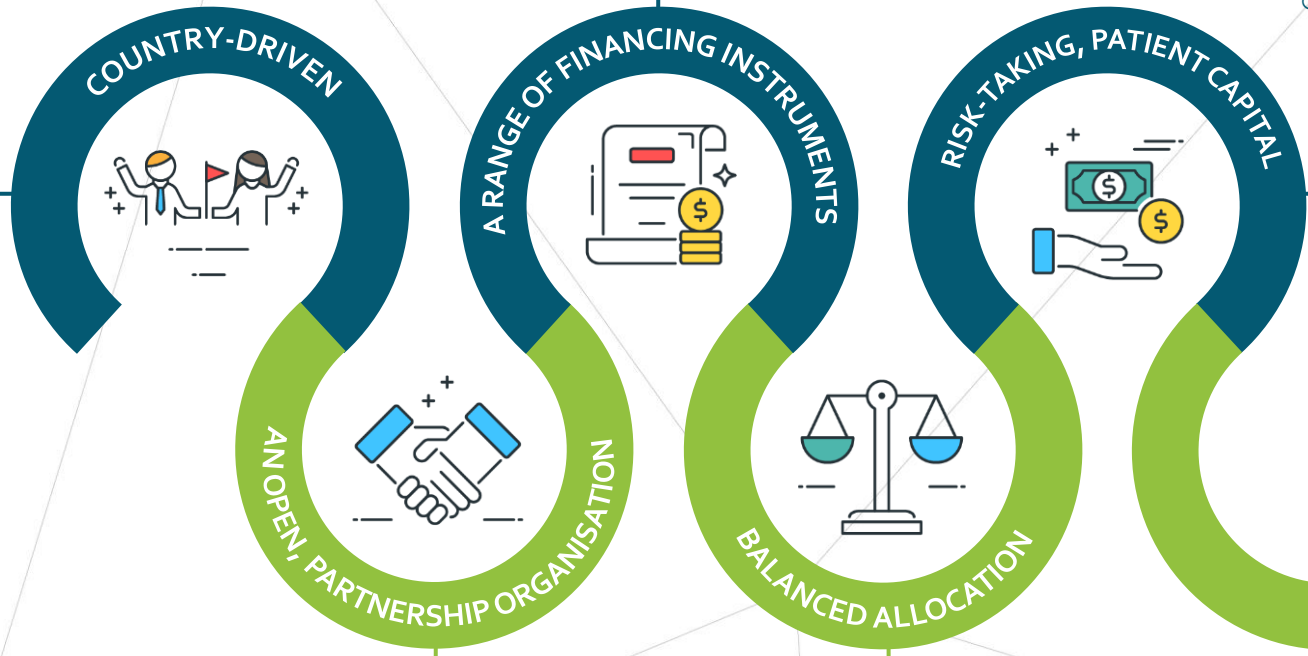
02

Supporting developing countries to transition to low-emission, climate-resilient societies

03

Serving as a hub of the climate finance landscape

How we work



COUNTRY-DRIVEN

- **Readiness programme supports country planning**
- GCF programming is aligned with country priorities

A RANGE OF FINANCING INSTRUMENTS

- leverage **blended finance**
- Piloting support for **new financial structures**

RISK-TAKING, PATIENT CAPITAL

- **accept higher risks to support early-stage project development & innovations** to catalyse climate finance

AN OPEN, PARTNERSHIP ORGANISATION

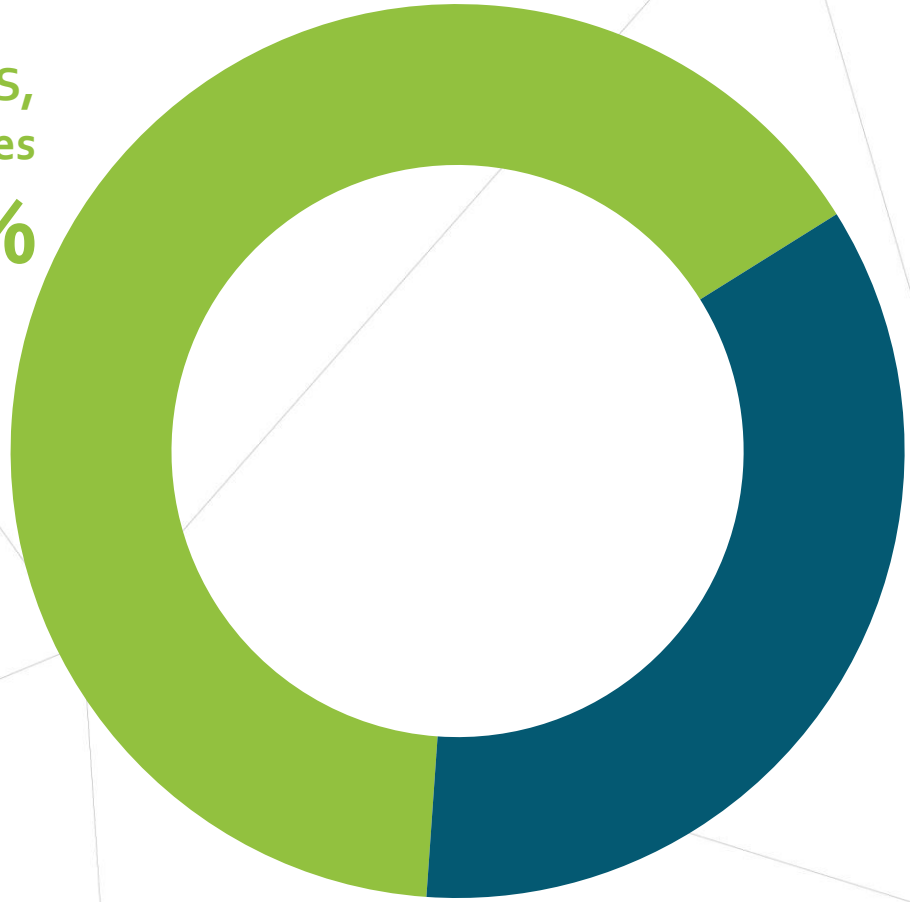
- over 200 **Accredited Entities** and delivery partners

BALANCED ALLOCATION

- targeting 50:50 allocation between mitigation & adaptation

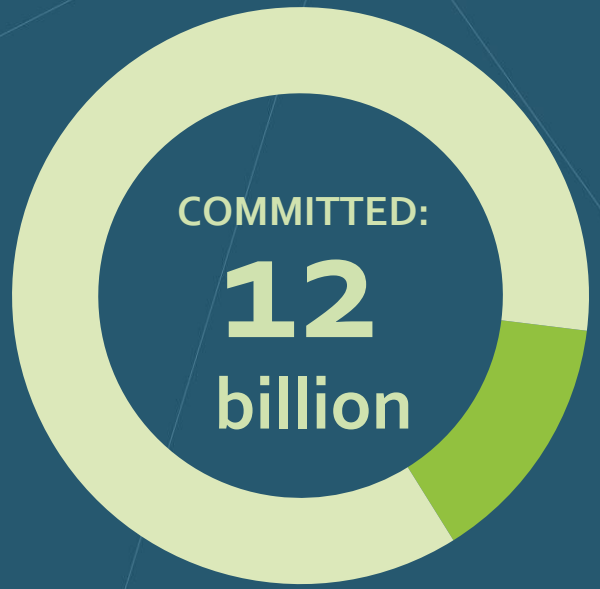
Our portfolio in focus

Percentage of GCF funding in priority regions



GCF Portfolio in Sustainable Transport

Rest of GCF funding: 10.3 billion



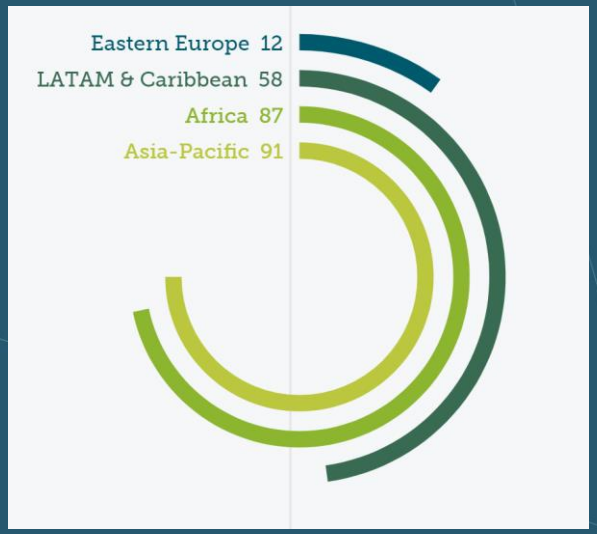
Sustainable Transport: 1.7 billion

10.1 billion
CO-FINANCING

Total Mobilized

45 billion

216 Projects*
*16 MULTI-REGIONAL



OUR OBJECTIVES IN LOW EMISSION TRANSPORT

What:

- **Policies for accelerated shift to public and low-carbon transport. - READINESS**
- Transit oriented and mobility-based transport policy and planning.
- Electric vehicles and e-mobility.
- Low carbon transport and non-motorised transport.
- **Infrastructures and storage solutions for low carbon transport deployment.**
- **New generation integrated RE-to-zero emission fuel for not-yet electrifiable uses.**

How:

- Innovative business models and high-impact innovative technologies
- cathalytic, country/regional level programs
- Mobilizing funds at scale through de-risking investments, and unlocking local capital.
- Looking at innovative financial mechanisms.
- Sharing knowledge of successful innovations and funding mobilization; increasing country green procurement capacity and greening the supply chain.

PARADIGM SHIFTING PATHWAYS

Low Emission Trasnport

1. **accelerating shift to low emissions public transport**

2. rapidly electrifying transport systems

3. **supporting scale up of new generation zero emission fuels for not-yet electrifiable uses.**

From pathways to projects

Sector		Actions across the drivers of the GCF Strategic Plan			
Low emission transport		Transformational planning & programming	Catalyzing climate Innovation	Mobilization of finance at scale	Coalitions & knowledge to scale up success
Paradigm shifting pathway	Accelerating shift to low emission public transport	• Prioritise TOD planning with electrified public transport powered by RE • Integrate public transit with NMT (protected bike lane networks, bikeshare systems, charging infrastructure, complete streets) • Develop national decarbonisation roadmap and central paltform for public transport • Integrate multimodal pulibc transport (fare/payment-ticketing/smart card), IT integration, physical integration	• Introduce policy/strategies to shift drivers to walking, cycling, public transport • Develop big data transport solutions for end-to-end integration and real-time-performance services (smart fare/multimodal systems with easy transfer infrastructure/payment) • Develop TDM strategies (parking management, electronic road pricing, LEZ/ZEAs) • Repurpose motor vehicle space to NMT, public transport, housing or green space	• Support syndication for mobilising public/private finance for BRT, LRT, MRT with min revenue/risk guarantees • Enhance credit and guarantees for municipal bonds • Develop innovative public-private financing models with investment in non-revenue infrastructure (PPPs, pay-as-you-use/save, vehicle leasing, utility ownership) • Introduce equity/green financing to multiply options and understand local challenges/opportunities	• Introduce standards and specification for emissions that encourage high occupancy public transit, walking, and cycling over private vehicles • Develop institutional capacity (workshops, trainings, exchanges, community of practice groups)
	Rapidly electrifying transport systems	• Introduce transition strategies/policies (grid-to-transport and carbon pricing, preferential access, purchase incentives) • Pilot with plan for scale up elecric public transit (vehicles, depots, charging infrastructure) • Develop procurement policies for commercial electric vehicles • Greening of charging infrastructure with integrated RE • Develop national decarbonisation roadmap/platform for unified vision	• Innovate business models for charging and storage as services • Innovate energy storage and vehicle-go-grid-to-depot service models • Build utility-operator partnership models for end-to-end electriciation • Prioritise charging infrastructure for electric transit uptake (buses, paratransit vehicles, high travel modes) • Develop cost-effective charging • Explore secondar market for batteries	• Develop lease PPPs (batteries, buses, operations) for changeover to electric • Support syndication for vehicle-to-depot electrification • Anchor investment in supply chain for commercial Evs • Integrate new stakeholders into funding/financing (utilities, new investors for leasing) • Explore options to bring in OEMs into financing (deferred payments or vendor finance schemes)	• Develop institutional capacity (workshops, trainings, exchanges) • Establish facilities, community of practice groups, or platforms to share lessons learned and best practices • Electric grid analysis for electric public transit capacity (C40, 2020)
	Supporting scale up of new generation zero emission fuels	• Use a cradle-to-grave planning approach for alternative fuel adoption to avoid encouraging growth of fuels which have negative impacts on resource use and overall emissions • Address regulatory standards • Unify vision through national decarbonisation platform	• Integrate decentralised RE to hydrogen production and storage solutions • Pilot or implement small-scale adoption to trial new technologies and infrastructure deployment • Utilise local resources for biofuel generation, particularly those removed from food supply competition (in other words, cattle manure as a deriative versus corn as direct competition)	• Introduce aay-as-you-use/save models for hydrogen or next generatopm zero carbon fuels • Integrate new stakeholders into planning and funding/financing • Allow subsidies and no-to-low interest financing for initial adoptions as technology develops	• Support additional research for risk reduction • Develop institutional capacity (workshops, trainings, exchanges) • Establish facilities, community of practice groups, or platforms to share lessons learned and best practices

1. Develop national decarbonization roadmap for transaport
2. Build partnership/PPP models for end-to-end programs
3. **Integrate decentralized RE to hydrogen and storage solutions at the service of transport**
4. **Pilot adoptions of new fuels/technologies and integrated concepts**
5. Utilise local resources for alternative fuel generation, particularly those removed from food supply competition
6. Introduce PAYU or other models for hydrogen/alternative fuels, **allow subsidies and no-to-low-interest financing for initial pilots/adoption**
7. Develop capacity (technical, financial, institutional), establish platforms/communities of practice.

Example – regional program

- **Component 1 – Technical Assistance (grant)**
  - Preparation of studies, policy frameworks, ports/shipping decarbonization plans
  - **Institutional, financial and technical** capacity building program (i.e. to governments, national and local FIs, port authorities, operators, supply chain actors)
  - **Transaction advisory and studies for individual pilot projects/program components, in support of investment de-risking**
  - **Project pipeline formation, selection and readiness.**
  - **Project management.**
- **Component 2 – Public Investments (loan)**
  - **Infrastructure investments** to support the development of **integrated** pilots (e.g. generation and storage of green ammonia, transport and storage to port, vessels) and ancillary infrastructure
  - **Investment for grid** modernization, digitalization, and resilience to improve grid's flexibility to integrate larger amounts of VRE, limit curtailment or grid instability and adapt to climate change related shocks and grid code requirements
  - **Community Adaptation** – action at the level of the local community (e.g. fishing/small tourism vessels) fostering resilience and adaptation.
- **Component 3 – Risk Mitigation Instruments (grants + guarantees)**
  - mitigate the critical risks related to private capital investment in an innovative technology (demand risk)
  - guarantees to mitigate risks (shyness of private investors/FIs towards technology and countries)

CONSIDERATIONS:

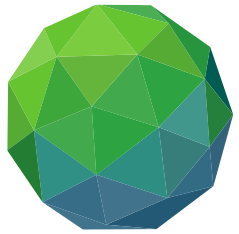
(1) A similar structure can be implemented at country level, through public AE and LFIs, PPPs welcome.

(2) At country level, a platform can be created, with the appropriate AE to crowd-in private investors and aggregate pipeline

CONSIDERATIONS

1. Craft a blended solution starting from the countries' level of readiness
2. Grants to enable readiness and capacity building
3. In parallel, utilize traditional finance to mobilize public and private markets
4. Address financing and market barriers through Risk Mitigation
5. Innovative finance (results-based, interfacing with carbon markets, green bonds) can also be part of the equation

IT IS KEY TO THINK BEYOND THE INDIVIDUAL PROJECT LEVEL, TOWARDS A SYSTEMIC (I.E.E VALUE CHAIN) OR COUNTRY APPROACH



GREEN
CLIMATE
FUND

Raising
ambition.

Empowering
action.

Thank You