

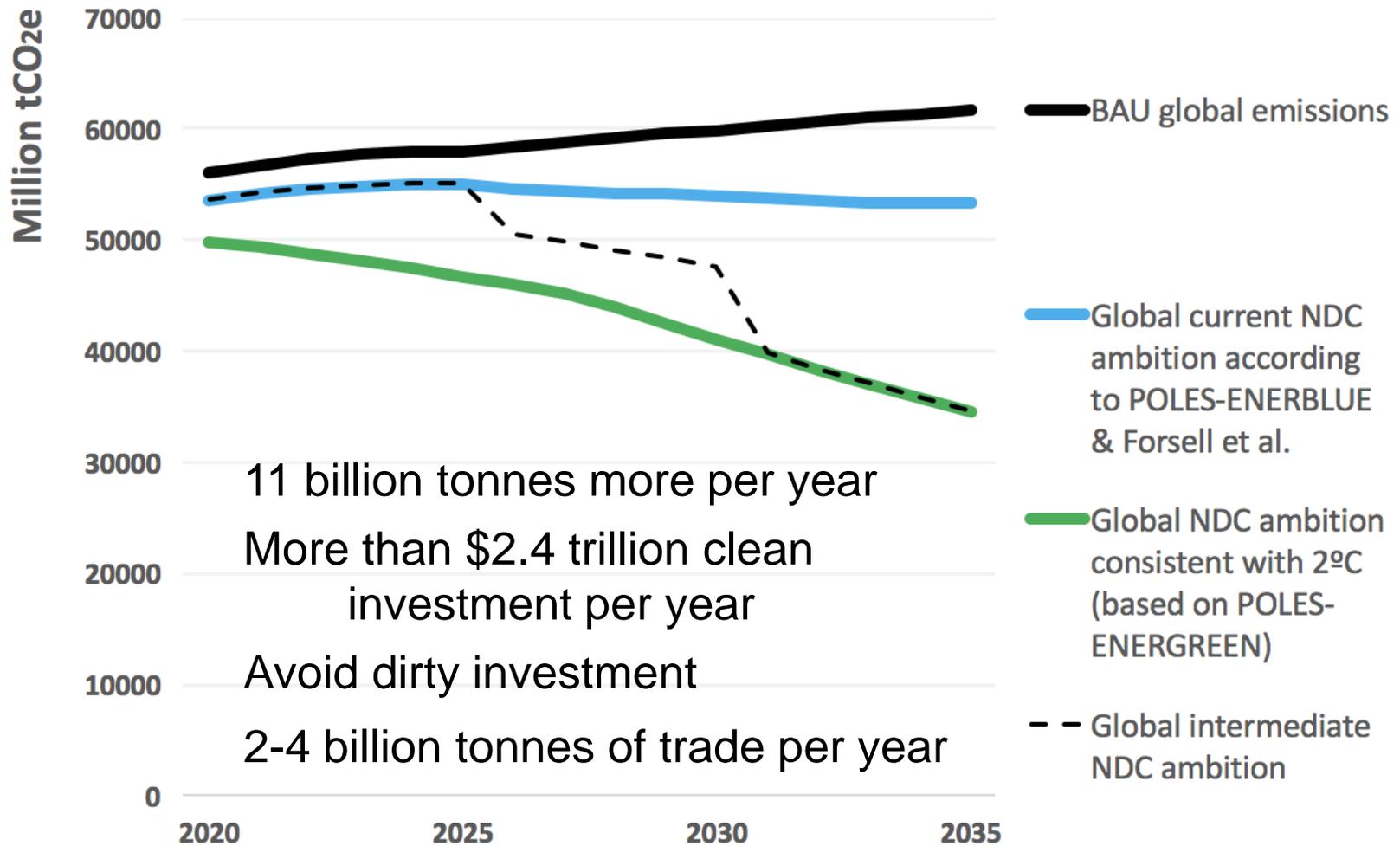
Challenges with global climate stabilization: the role of international transfers

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Current NDC ambition as perspective



Sources: EDF based on Enerdata/POLES, IIASA, FAO

IPCC, 2018; Piris-Cabezas, Lubowski and Leslie, 2019

Key messages

1. The world needs to transition to net zero emissions, fast.

Effective transfers across countries will help us go faster.

Even once developed countries reach 'net-zero', reductions will need to happen in developing countries

2. Transfers for large-scale high-integrity mitigation and enhanced mutual ambition require shared vision, trust and true collaboration

3. A 'Climate team' is a mechanism to mobilise resources to accelerate the transition of developing and emerging economics to a low emissions.

And generate supply of high-integrity international units

Self enforcing agreements

These are the only possible climate agreements

Paris is our latest try

In a repeated game countries can sustain cooperation in response to the threat of future non-cooperation

Paris helps enable this through emphasis on monitoring, transparency and common reporting rules globally

Paris also allows transfers between countries

Border carbon adjustments could allow penalties between countries

Recent insights: the value of agreements on investment, and of transfers

Transfers across countries can allow us to cooperate more – and stabilize at a lower temperature (Fong and Surti, 2009)

Cooperation to overinvest in green technology and constrain emissions is more effective than agreements on emissions alone (Harstad et al, 2018)

But how do we structure transfers?

Timing of transfers

'Financial Transfers and Climate Cooperation' with Steffen Lippert, Auckland Uni and Edmund Lou, Northwestern

Payments made each period as 'host' country invests can sometimes allow more cooperation than results-based payments

when 'green' investment is high value but high cost and when the host's potential for mitigation is high

Results-based payments favor the buyer;
investment-based payments favor the seller

If the buyer can commit to pay, more cooperation is possible

Mitigation contracts are complex

Free-riding: lack of enforcement

Adverse selection: non-additionality

Dynamic adverse selection: ambition

Moral Hazard: risk bearing

Incomplete contracts and hold up: ability to commit

Capital market challenges

Lack of capacity: policy / action

Poor decision making under uncertainty

Mitigation cannot be observed – it is not a commodity

Long-term relational contracts are a better model for linkages between countries.

In some cases these could be so strong they could enable full ETS linking – e.g. CA-Quebec

In general, not.

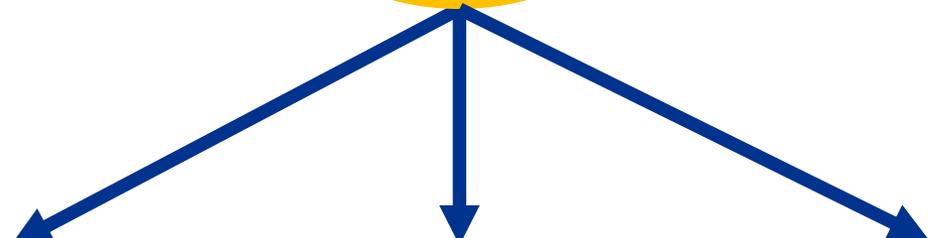


Climate teams: working together to accelerate mitigation

Host



Partners



What 'hosts' need to overachieve an ambitious baseline and supply units

Credible demand

Guarantee of income flow if they make large, costly (economically or politically) systemic changes

e.g. Transition to renewable electricity sector

institutions to facilitate closure of coal generators

large scale solar plants, micro-hydro

grid infrastructure to manage intermittency



Ability to attract investment

Credible demand

Partners must demonstrate

domestic action up to limits of short-term potential mitigation at 'reasonable cost'

credible commitment to financing and broader support

What hosts need (cont)

Political support

Capability: policy, sectoral transformation

Co-benefits associated with mitigation

- economic development – capability and technology

- air quality improvements

- poverty reduction



What 'partners' need

1. 'Internationally transferrable mitigation outcomes' to meet ambitious international targets during period of domestic transition to low emissions
 2. Credible units in the eyes of domestic taxpayers and voters
 3. Credible supply – partner resources committed early
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Credible supply

Host must demonstrate

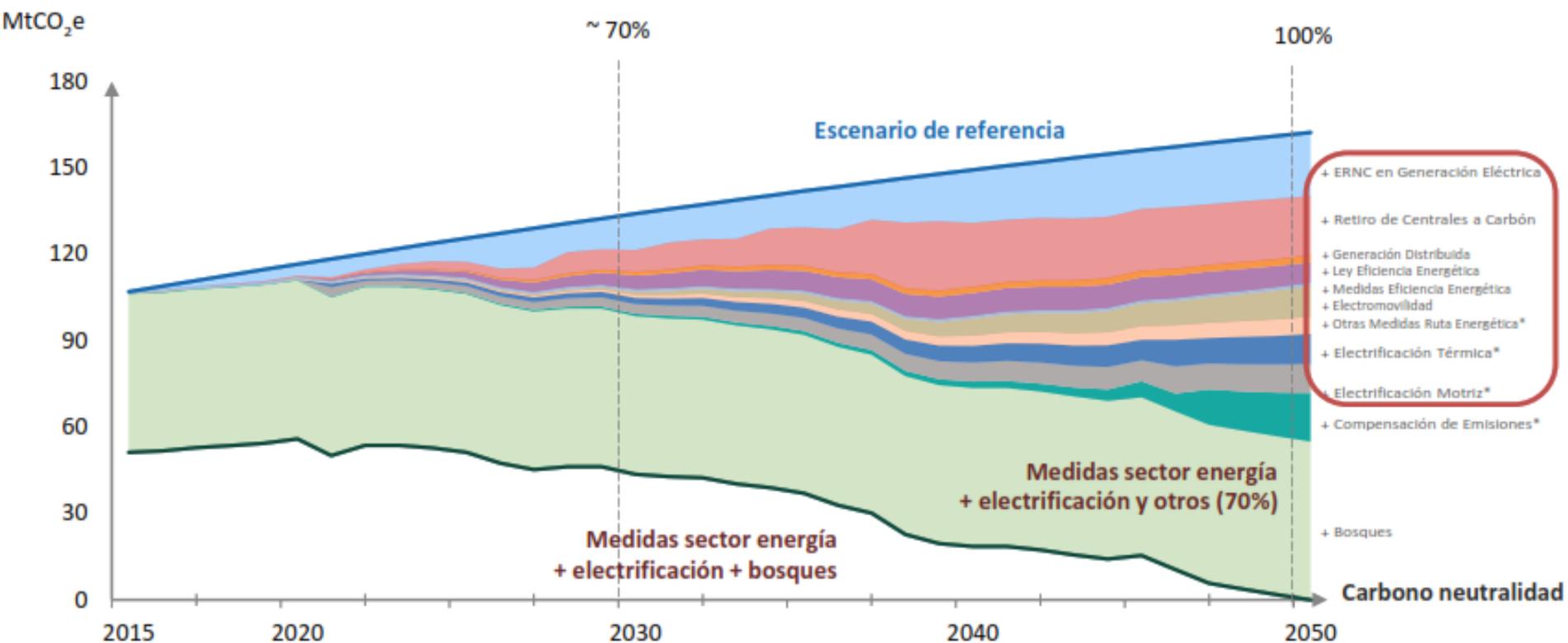
credible potential to exceed absolute NDC
– at a cost that it is not reasonable to
expect host to bear alone.

policy capability – e.g. ETS/strong tax –
and clear transformational plan

and/or

specific transformational projects – e.g.
closing coal power plants

Achieving Carbon Neutrality



Fuente: División Ambiental y Cambio Climático

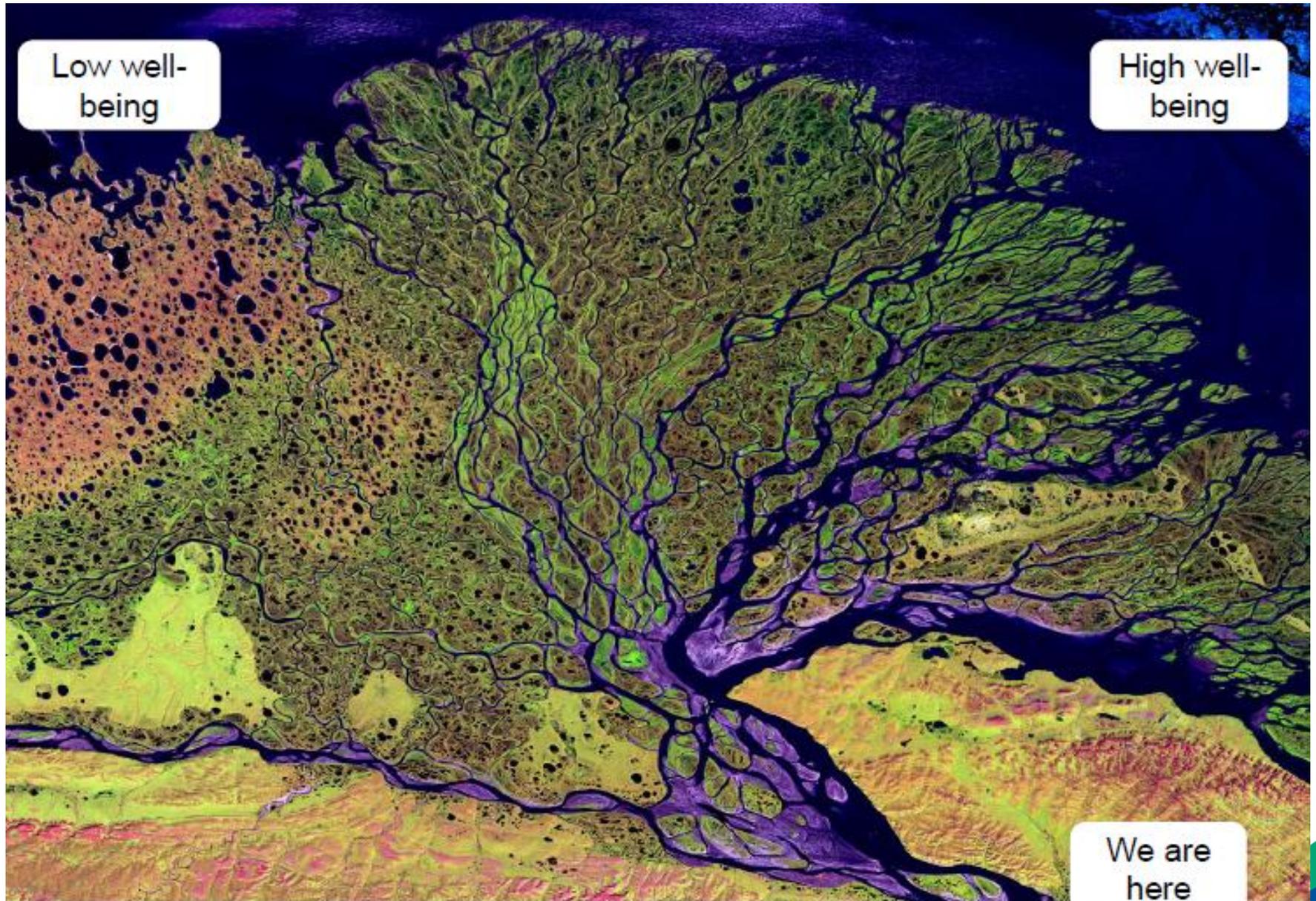
Nota: *Medidas que deben ser estudiados en mayor profundidad para su correcta cuantificación

The future will be different



But it could be really wonderful

Choose the next step in our path



Policies for ambitious mitigation

Agreed long-term vision – carbon neutrality in 2050 and beyond?

Institutions to support predictable climate policy and hence predictable investment environment

Climate Commission?



Cap and trade - emissions trading?

Provides control over quantity of emissions –
facilitates international transfers

Could allow private actors to directly engage in
international transfers

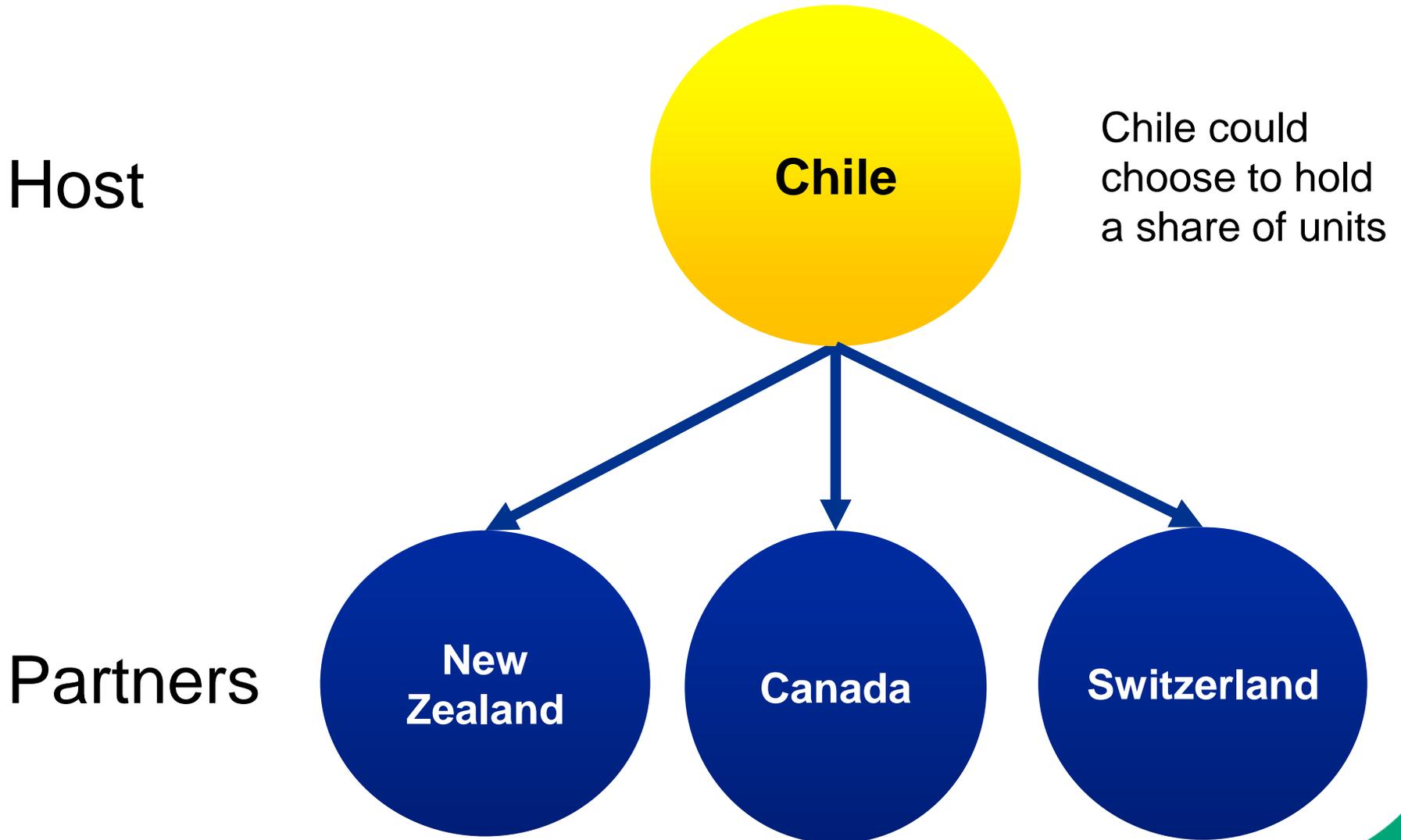
Could work well in some developing countries –
particularly where they are market-based economies:
e.g. Chile or Colombia

Portfolio of policies

Climate change mitigation needs to permeate all decision-making, public and private

- Emission pricing – to support all other policies
 - Research and innovation to support host-specific mitigation
 - Education
 - Critical infrastructure investments
 - Coordinate complex transitions – e.g. transport electrification
 - Supportive regulations – e.g. building standards
 - Identify regulatory barriers
 - Revisit regulations designed for a fossil-fuel world
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Incentives for partners to work with host: constraint to sell within 'team'



What both hosts and partners need

Credible high integrity agreement in the eyes of other countries to encourage reciprocal cooperation

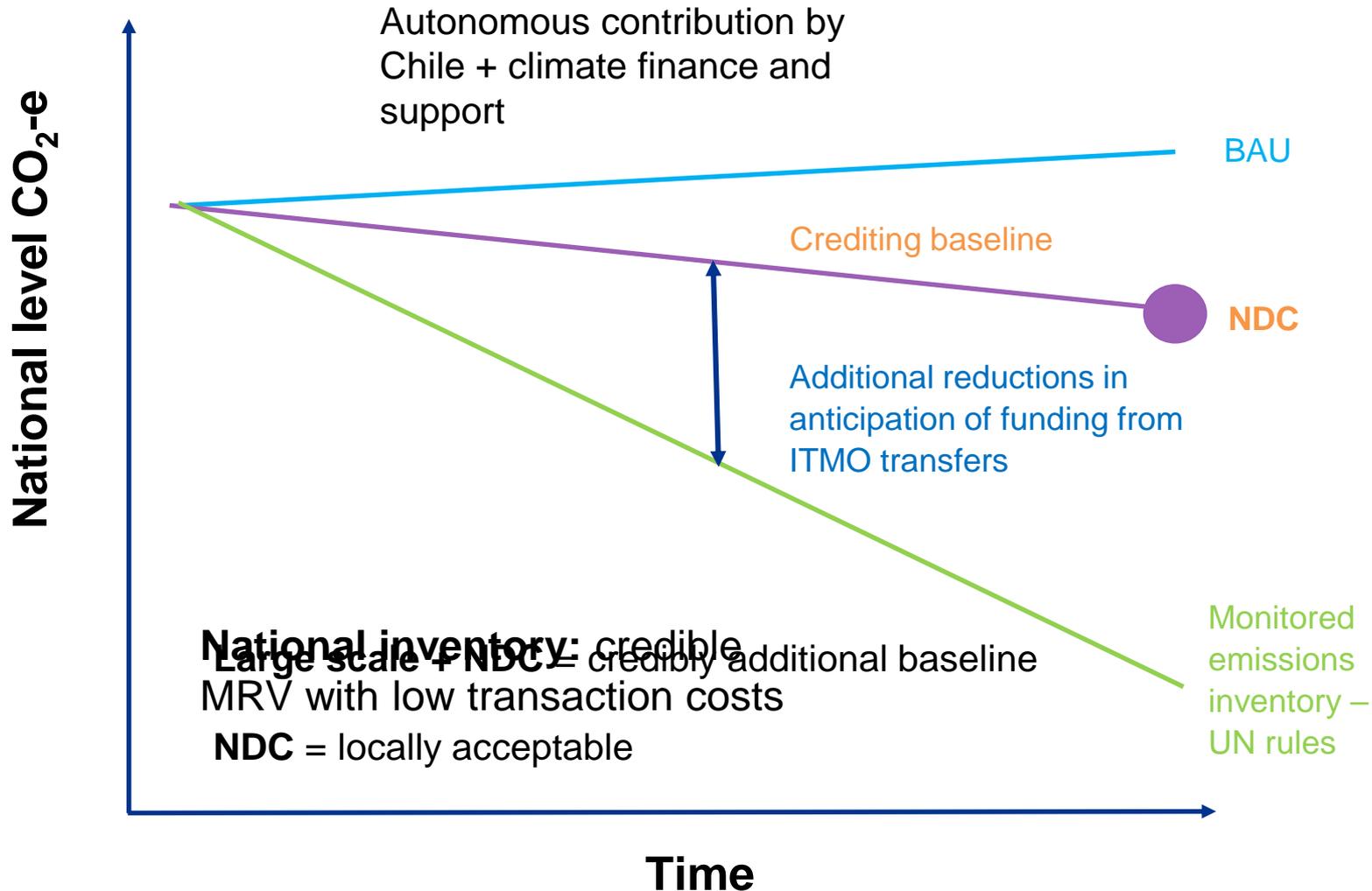
‘I will if you will’



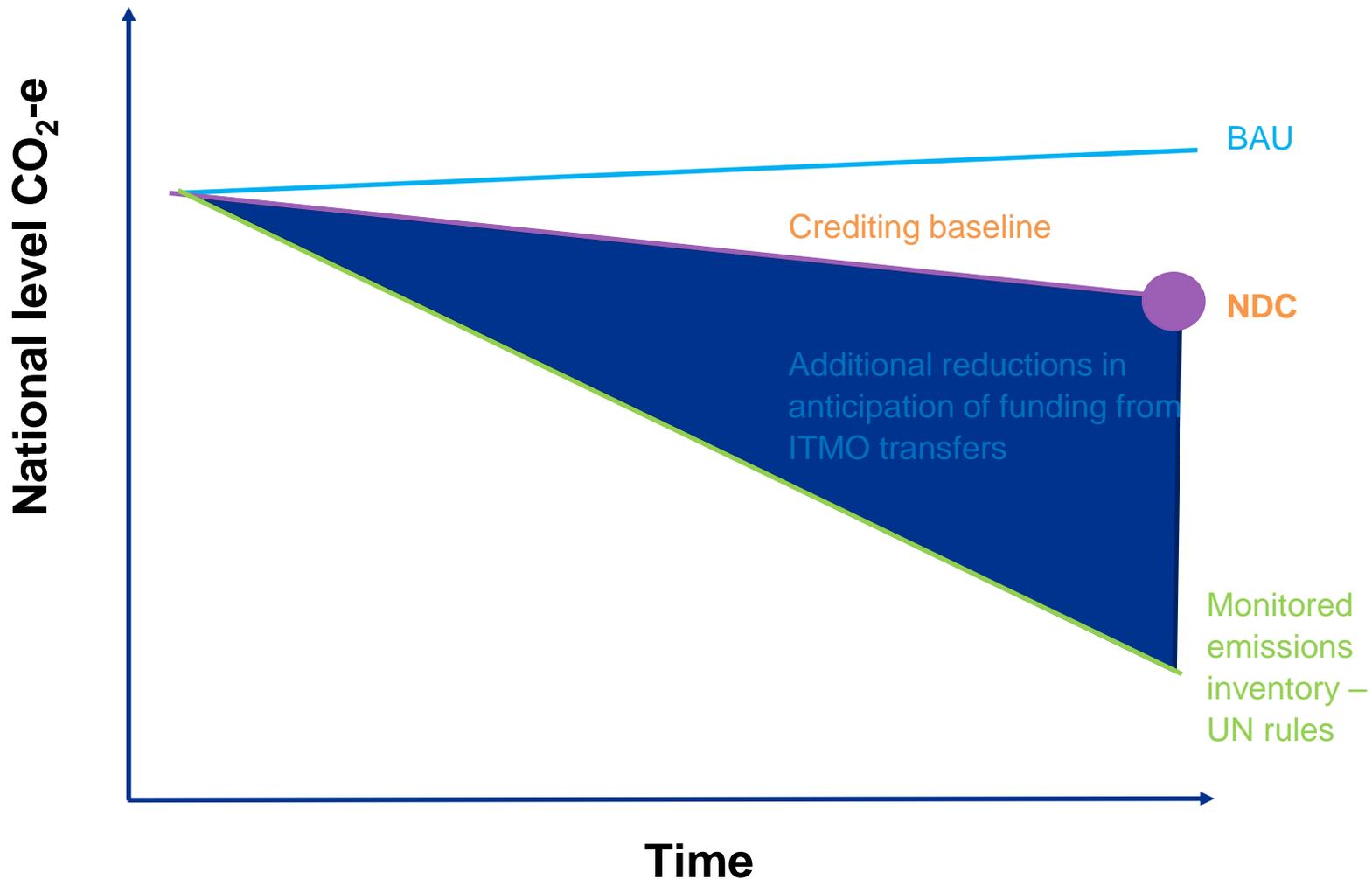
High integrity units

1. No double counting
 2. High ambition – by host and partner countries
 3. Long-term net-zero commitment and credible plans for transformation
 4. Large scale – ideally economy-wide, all sectors
 5. Multi-year commitment by both sides
 6. Strong monitoring, reporting and verification of emissions
 7. Private capital agreements aligned to get deep reductions
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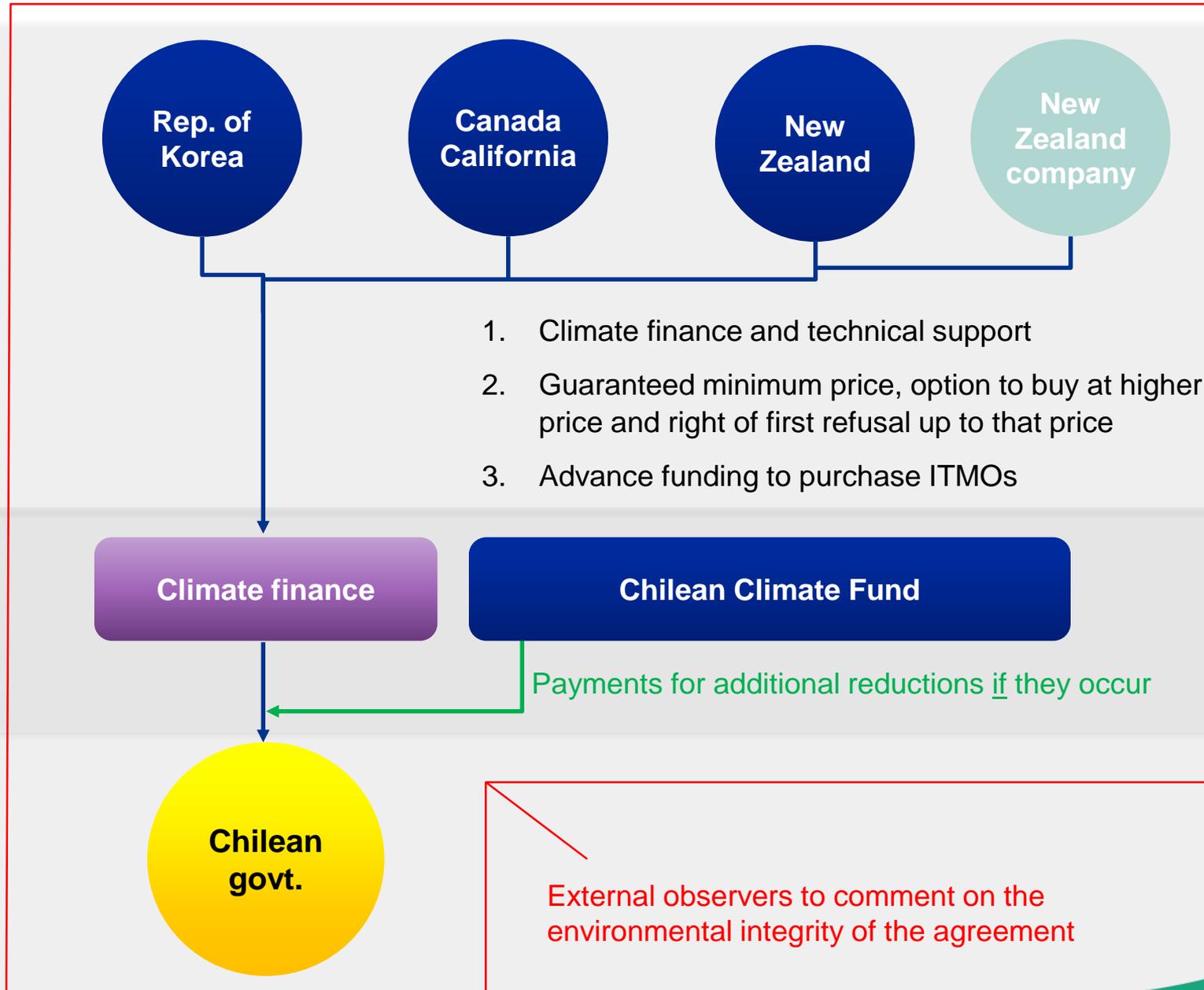
Creating Internationally tradable mitigation outcomes (ITMOs) in Chile



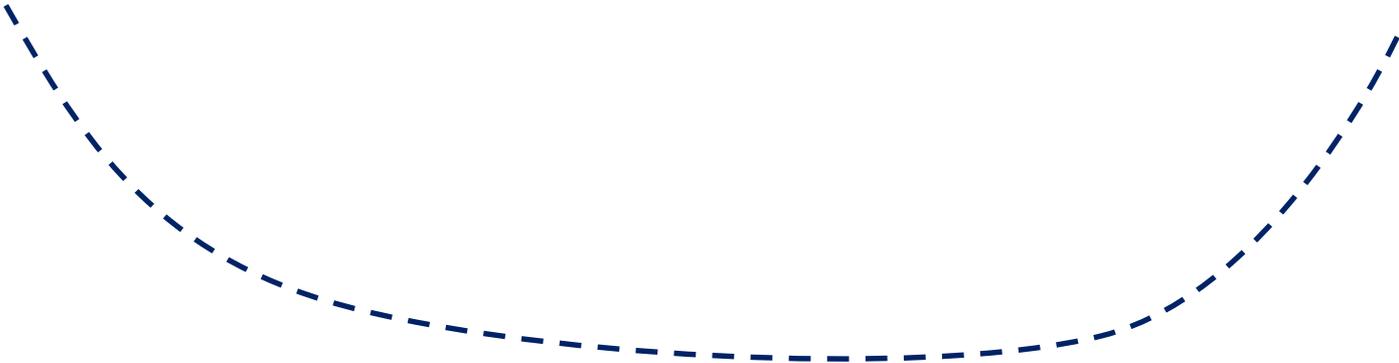
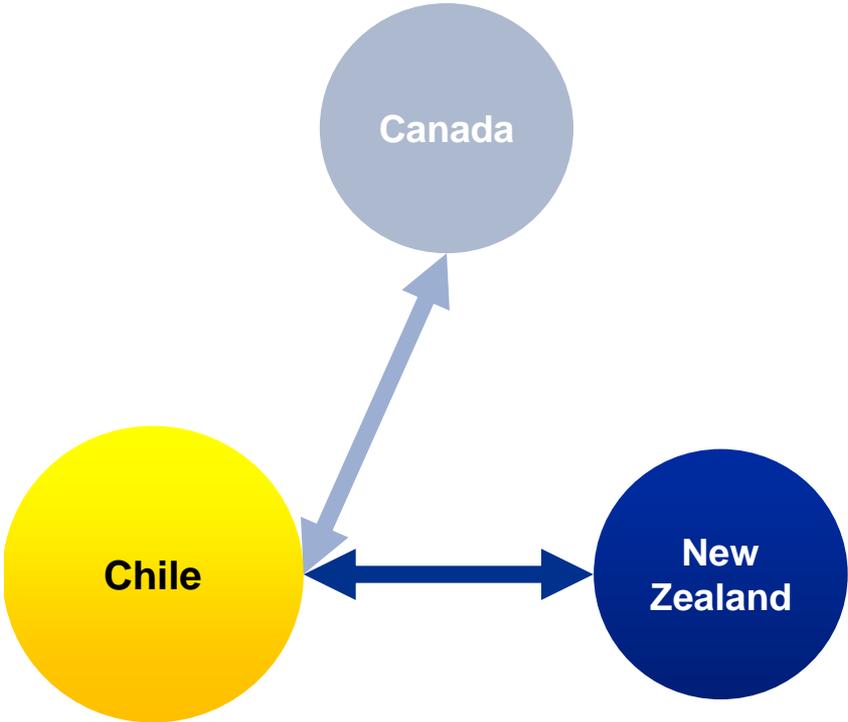
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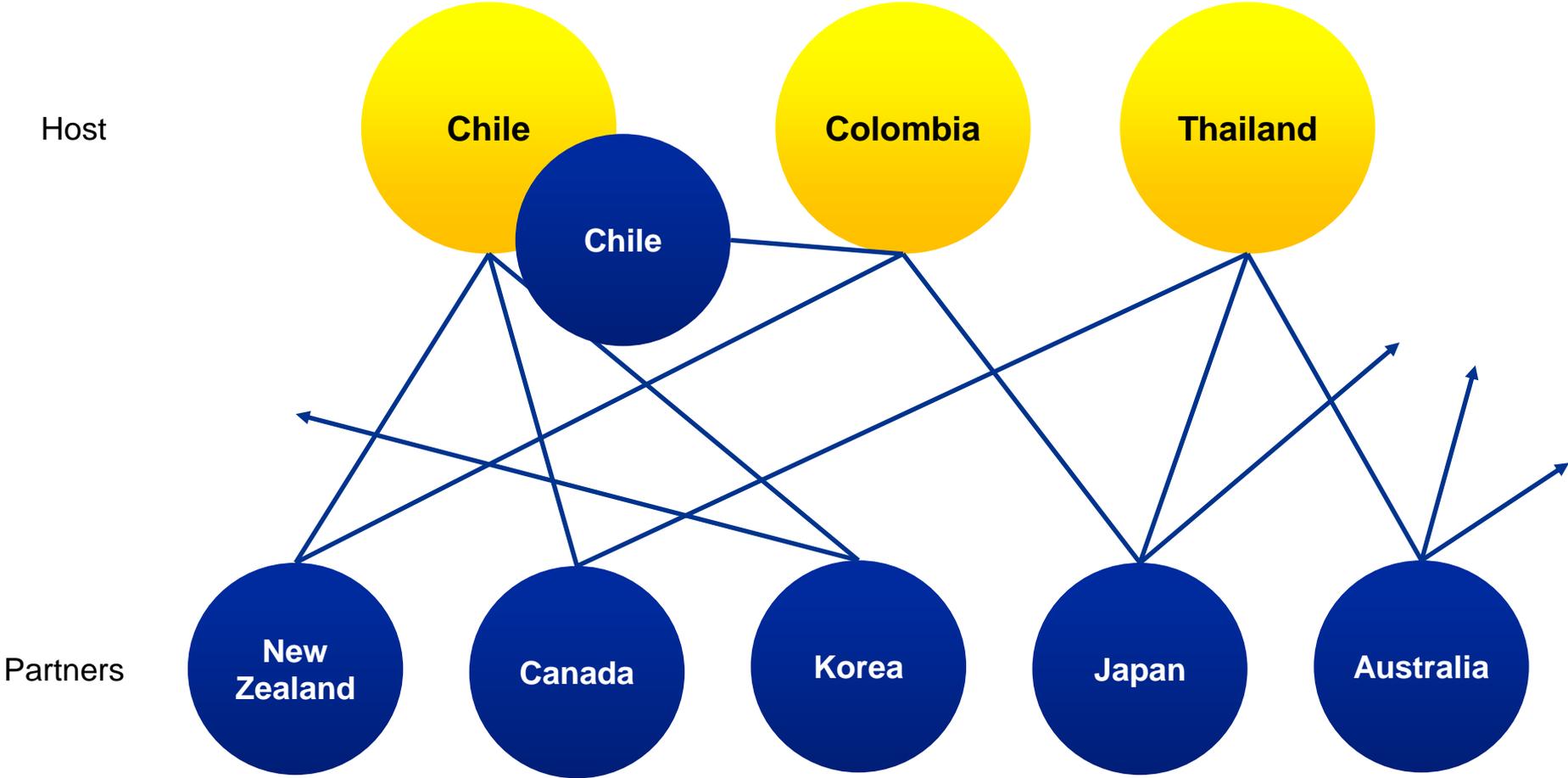
What is a 'Climate Team'?



Enabling private sector involvement



Network of climate teams?



Designing a climate teams agreement

Address issues of:

Environmental integrity

Enhanced ambition by all team members, timing of sales.....

Efficiency

How do we get the most mitigation possible at acceptable costs? Investment agreements aligned?

Equity

Sharing of gains and risks, price range

Endurance

Anticipating change and creating governance that allows response to changing conditions

Some key steps

1. Clearly establish commitments on long-term pathway to net zero emissions for host and partner countries
2. Set up governance arrangements
3. Develop and establish, in negotiation with partners and with external international oversight, a credible baseline for large-scale transfers
4. Negotiate price range for ITMOs
5. Establish up-front amount committed by each partner
6. Agree on timing of payments and actual transfer of ITMOs
7. Agree on complementary actions: technical cooperation; policy actions; enable clean investment; stopping dirty investments

Climate teams are not for all

Need:

- Unambiguous nationally determined contribution
- Good quality of national emissions inventory
- Ability to control emissions at a national scale

Climate teams could be an aspirational model and an incentive.

Uncredited
mitigation support

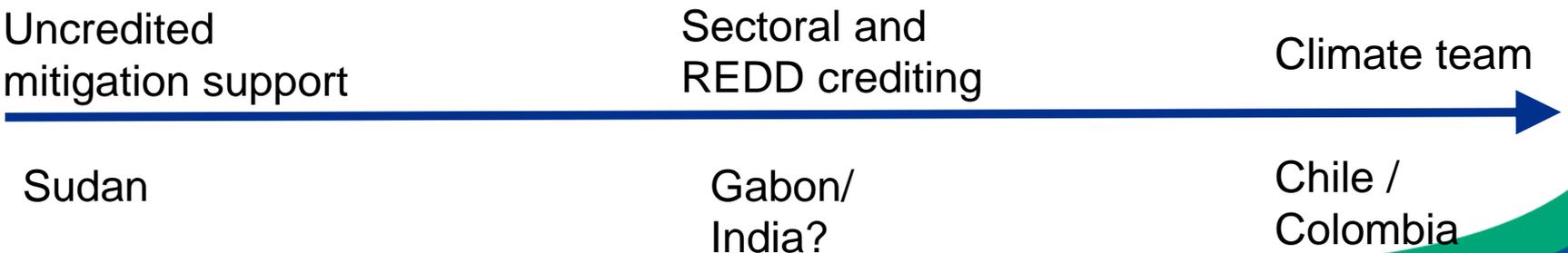
Sectoral and
REDD crediting

Climate team

Sudan

Gabon/
India?

Chile /
Colombia



Think large and small

Cooperate on a **large**-scale reductions and transfers to address a large problem – be brave.

Large multi-year agreements - contracts

Work in **small** groups of countries

Creating and sustaining cooperation and environmental integrity is easier on this scale

Trust and collaboration are what matters for creating supply, committing demand, and gaining the benefits from trade - not liquidity



www.climateteams.org

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