# Long-term decarbonization strategies A tool to manage the just transition

Amal Lee Amin Climate Change Chief amalleea@iadb.org







Holding the increase in the global average temperature to **well below 2 °C** and as close to **1.5 °C** as possible

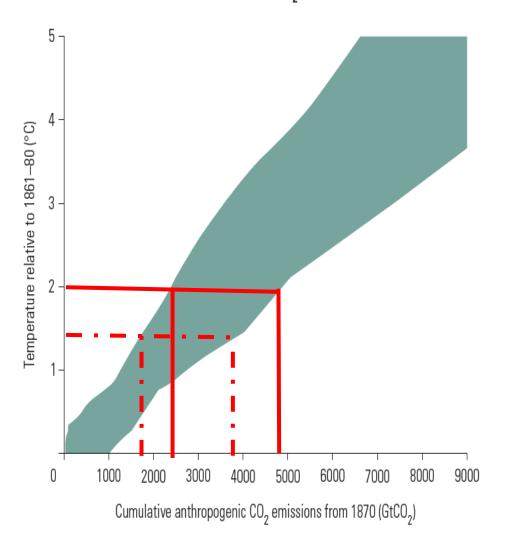
How much do we need to reduce global carbon emissions to implement Paris?

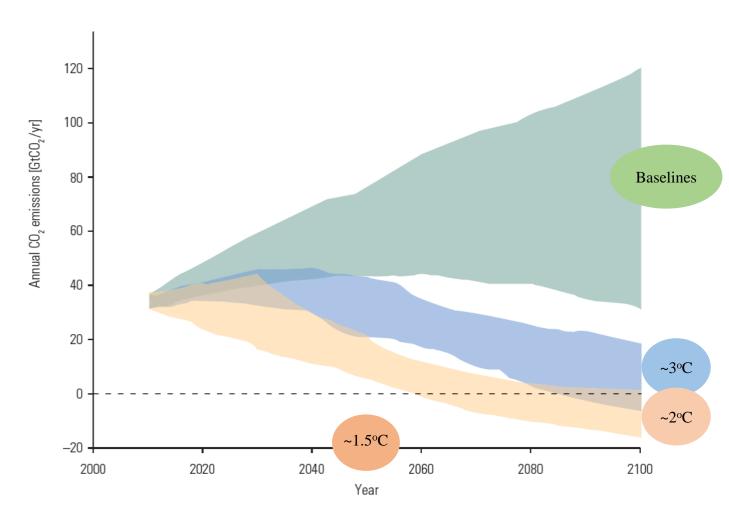
100%

#### Temperature targets imply a carbon budget

#### Rising Cumulative Emissions of CO, Mean Rising Temperatures

We **need zero net emissions** to stabilize climate, the question is when and how to reduce emissions





Fay, M., Hallegatte, S., Vogt-Schilb, A., Rozenberg, J., Narloch, U., Kerr, T., 2015. Decarbonizing Development: Three Steps to a Zero-Carbon Future. World Bank Publications.

### A world with zero net emissions is technically possible, building on 4 pillars



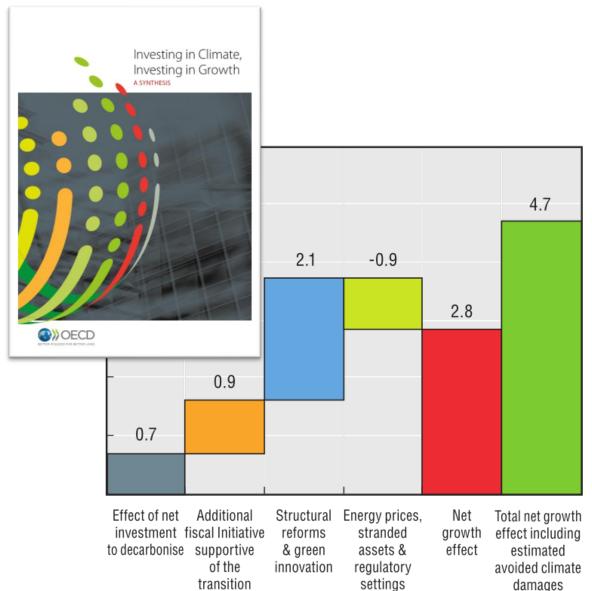






Decarbonization of electricity generation, i.e. renewable and/or Carbon Capture and Sequestration Fuel shifting (especially to electricity) in transport, heating, and industries Efficiency in all sectors, including building, transport, and agriculture Preservation and increase of natural carbon sinks

## A world with zero net emissions is economically possible



### What governments need is guidance on making decarbonization policies politically-acceptable



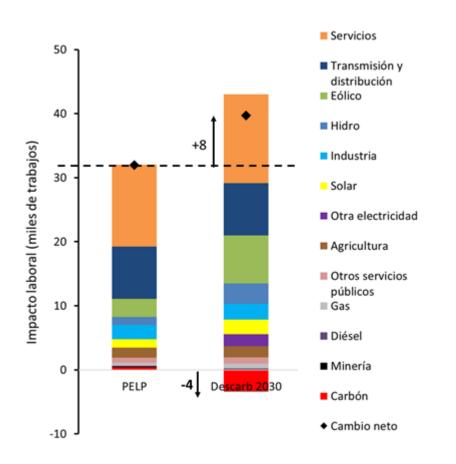
1. Minimizing political and social costs of decarbonization action

2. Maximizing development and political benefits of decarbonization



#### Anticipating the **transition of jobs and communities**, and remedying tradeoffs: the case of **coal power plants phase out in Chile**

In general the transition away from coal is consistent with **net job creation**...



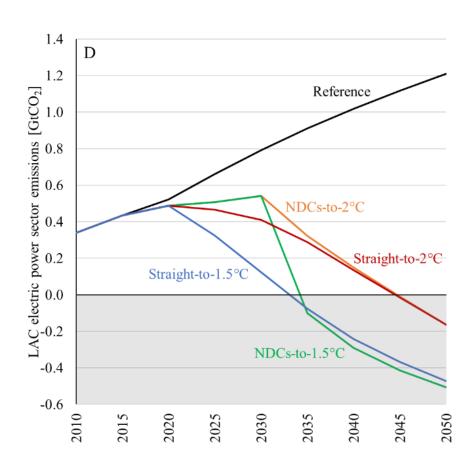
... but **managing the losers** may be essential to ensure a **just transition** aligned with SDGs

- For instance, 7% of workers from one municipality in Chile stand to lose their job
- Policy options include :
  - Adjust timing of transition to leverage "natural retirement"
  - General-purpose social protection, trainings and workforce benefits
  - Direct help to affected communities

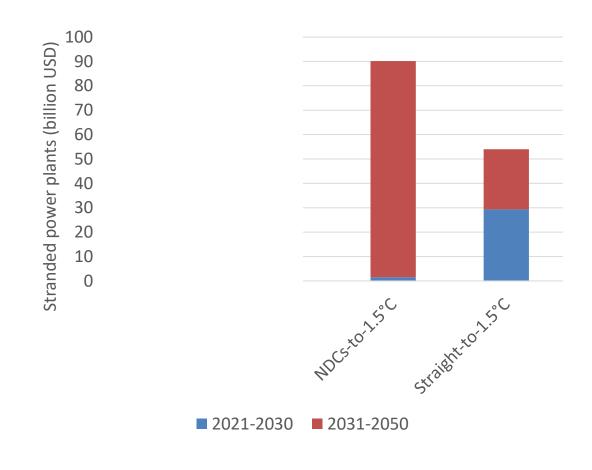
The IDB has **partnered with ILO** to replicate this Chilean study (consistent with Greening with jobs, ILO 2018) in 10+ LAC countries

### Anticipating the transition and remedying trade-offs: **short-term planning** and alignment with decarbonization strategies are **key to reduce long-term costs**.

NDCs in LAC are not quite aligned with 2°C and they virtually close the door to 1.5°C

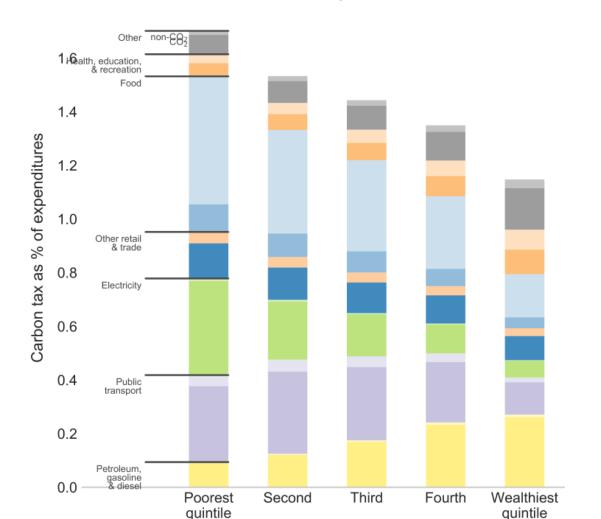


Stronger NDCs would reduce the need for stranded assets down the road

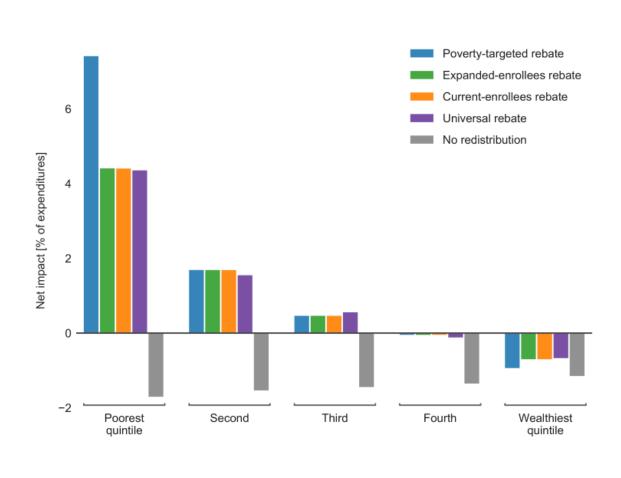


### Anticipating the transition and remedying trade-offs: **protecting consumers** from the negative impacts of **carbon pricing** (example for Chile).

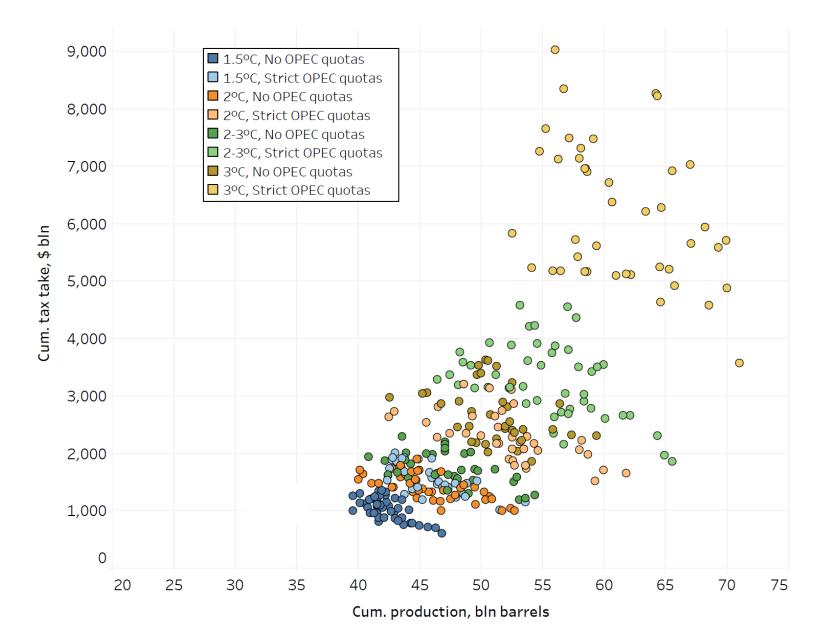
Indirect effects on Electricity, Public Transport and Food mean carbon taxes hurt poor consumers



**Recycling carbon revenues** in existing **cash transfer** programs transforms **poor households into winners** 



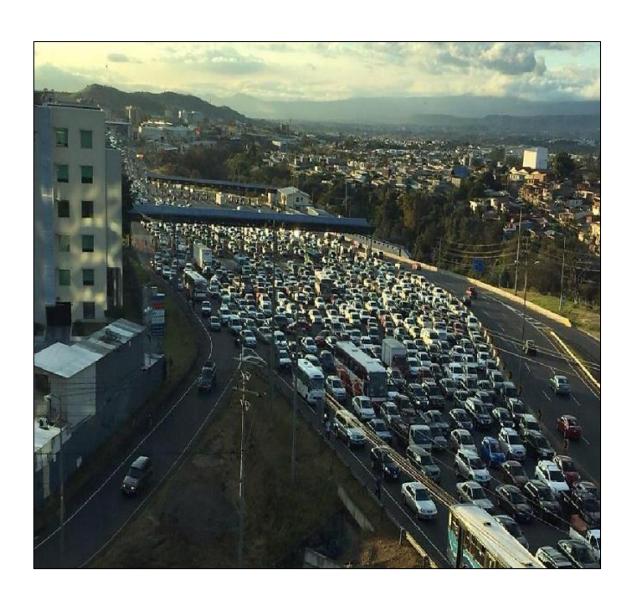
### Anticipating the transition, and remedying trade-offs: managing the impact of international decarbonization on **fiscal revenues in oil exporting countries**.



#### Manging the risk to export and fiscal revenues from oil

- Smart fiscal management has a small impact compared to policy choices in the rest of the world
- Policy options include:
  - Diversifying the economy

### Maximizing development and political benefits of decarbonization: public transport in Costa Rica



- As many cities in LAC, Costa Rica suffers from congestion
- 3.8% of GDP is lost every year in time spent in traffic, and premature deaths from accidents and air pollution
- The Government as issued a Decarbonization Plan that aims at making efficient public transport enabled by electric buses the number 1 option for users by 2050
- The IDB is supporting **pilot projects**, infrastructure deployment, and the design of **new business models** that work for bus operators, users, and the government
- Public transport is a decarbonization option that is also about improving lives and the business environment

#### Thank you! Questions?





- Amal Lee Amin Climate Change Chief amalleea@iadb.org
- Inter-American
  Development Bank

- 1. Getting to zero is technically and politically feasible, what governments need is guidance on making decarbonization policies politically-acceptable
- 2. Minimizing political and social costs of decarbonization action, for instance:
  - Managing the impact of coal phase out on workers and communities in Chile
  - Short-term planning and alignment with decarbonization strategies to reduce long-term social impacts
  - Managing the impact of carbon pricing on poor and vulnerable consumers
  - Managing the impact of international decarbonization on fiscal revenues in oil exporting countries
- 3. Maximizing development and political benefits of decarbonization, for instance:
  - Improving the business environment and quality of life with electric buses in Costa Rica

#### Further reading:

- https://blogs.iadb.org/sostenibilidad/en/three-steps-zero-carbon-future/
- <a href="https://blogs.iadb.org/sostenibilidad/en/is-there-an-affordable-way-to-make-voters-love-energy-price-hikes/">https://blogs.iadb.org/sostenibilidad/en/is-there-an-affordable-way-to-make-voters-love-energy-price-hikes/</a>
- <a href="https://blogs.iadb.org/sostenibilidad/en/how-much-is-it-going-to-cost-to-decarbonize-the-transport-sector-in-costa-rica/">https://blogs.iadb.org/sostenibilidad/en/how-much-is-it-going-to-cost-to-decarbonize-the-transport-sector-in-costa-rica/</a>