LEARNING by DOING

Mexico Team

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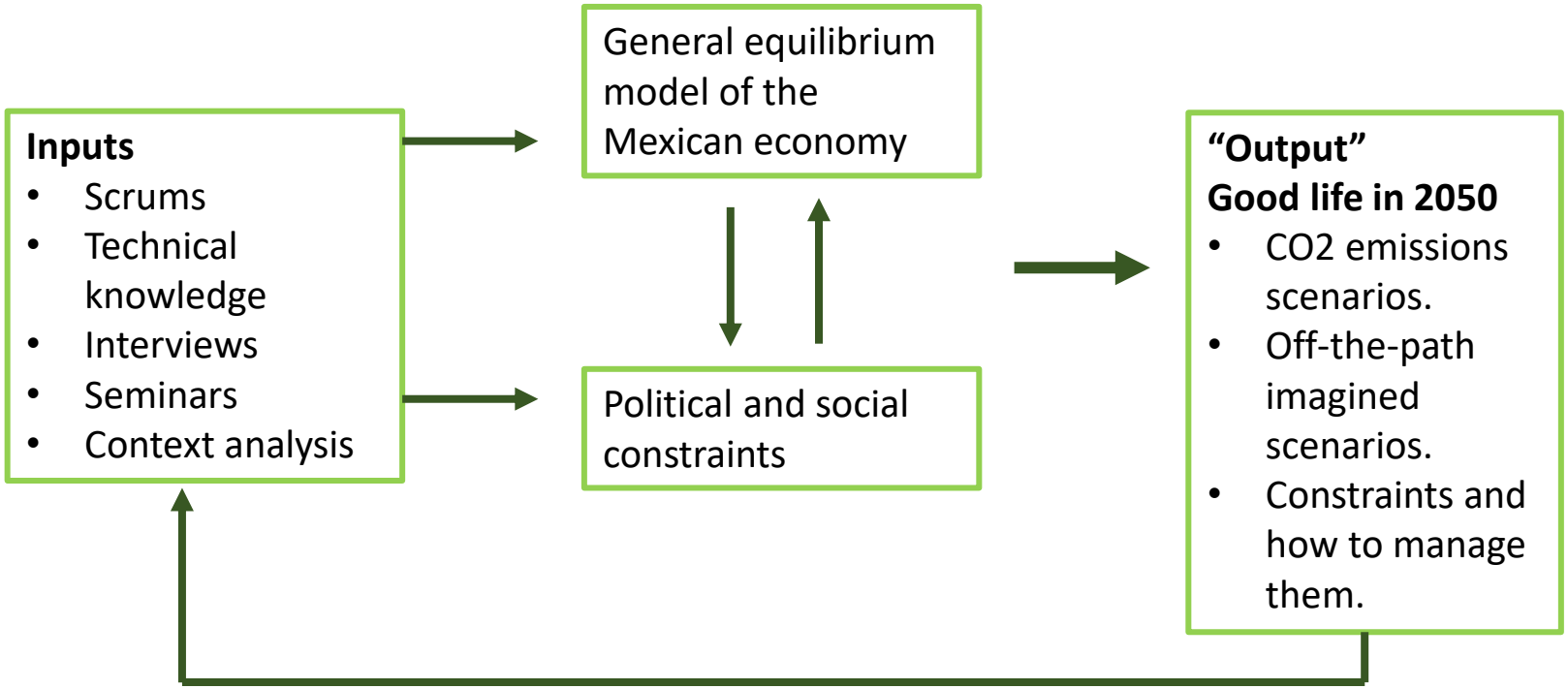
ITAM: Political-economy

ICM: Baseline technical knowledge

Elizondo, Ibarrarán and Boyd: General equilibrium model



Topics

Approach: We (mostly) know what to do technically, but we do not do it; why?

1. Sectorial analysis (energy and transportation)
   - Develops a Good Life narrative. Thinking not only on sticks, but on a specific type of carrot: hope for a better life.
   - Sets a baseline and, based on a general equilibrium model, it sets trajectories that are consistent with a low-emissions future (1.5^{o}-2^{o} C).
   - Political-economy: emphasis on the social and political feasibility of the trajectories and the set of actions to be implemented.

2. Societal demand for better environment
   - Analysis on the conditions under which citizens would effectively organize for demanding better environmental conditions as a necessary condition for sustained change.

Societal demand for a better environment

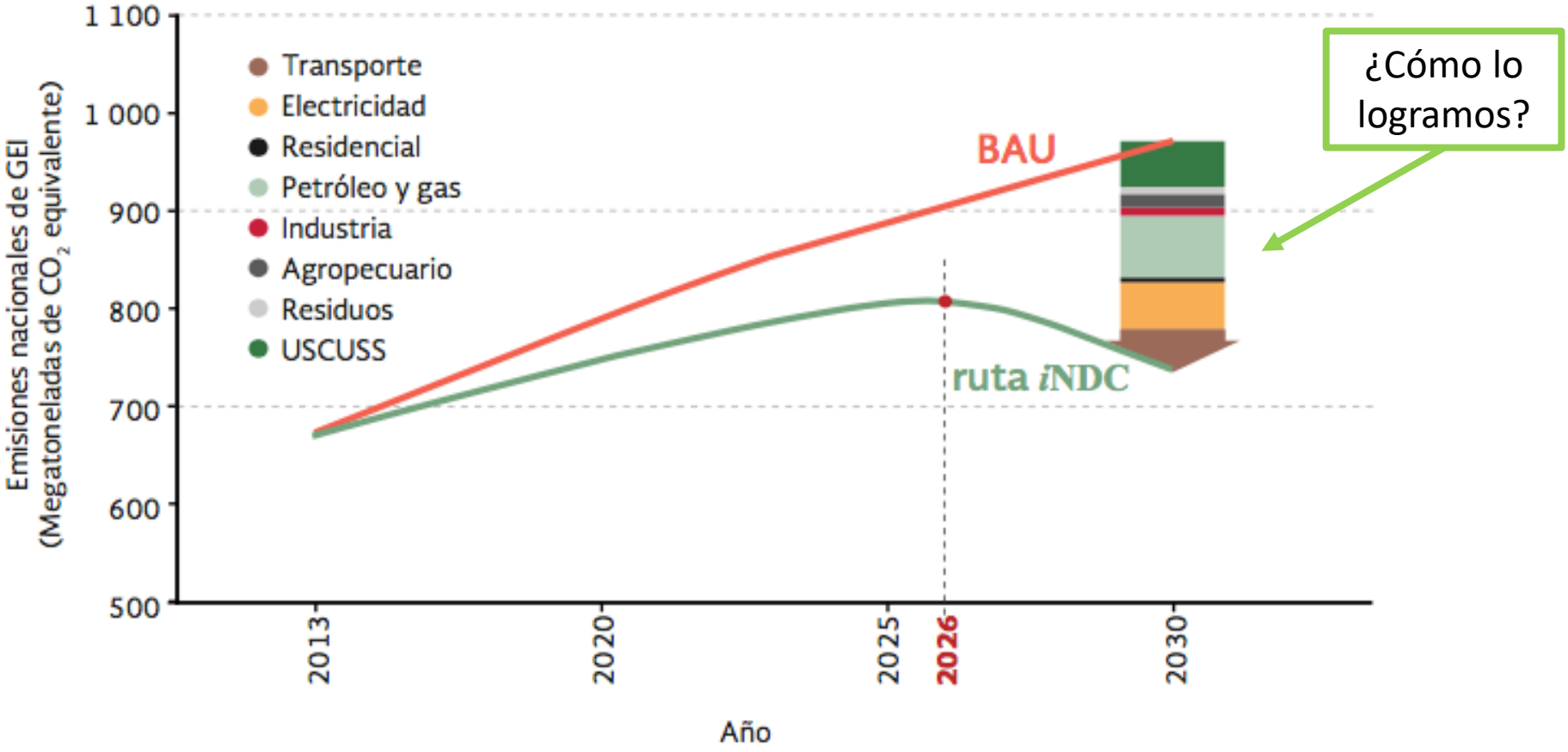
Societal demand as a necessary condition for change

- Mexicans consider climate change as one of the most important problems and we have sufficient technical solutions, why are these not implemented?
  - Collective action problems
  - Transaction costs
  - High discount rate by politicians
- Bottom-up solution.
  - Local governments
  - Communities
  - Endogenous solutions
- How can societal demand be created and sustained?
  - Sticks: Coercive regulation and taxes
  - Carrots: Compensations
  - **Hope: Eutopia/Better future/Good life**

Sectorial analysis: Energy

Emisions Scenarios

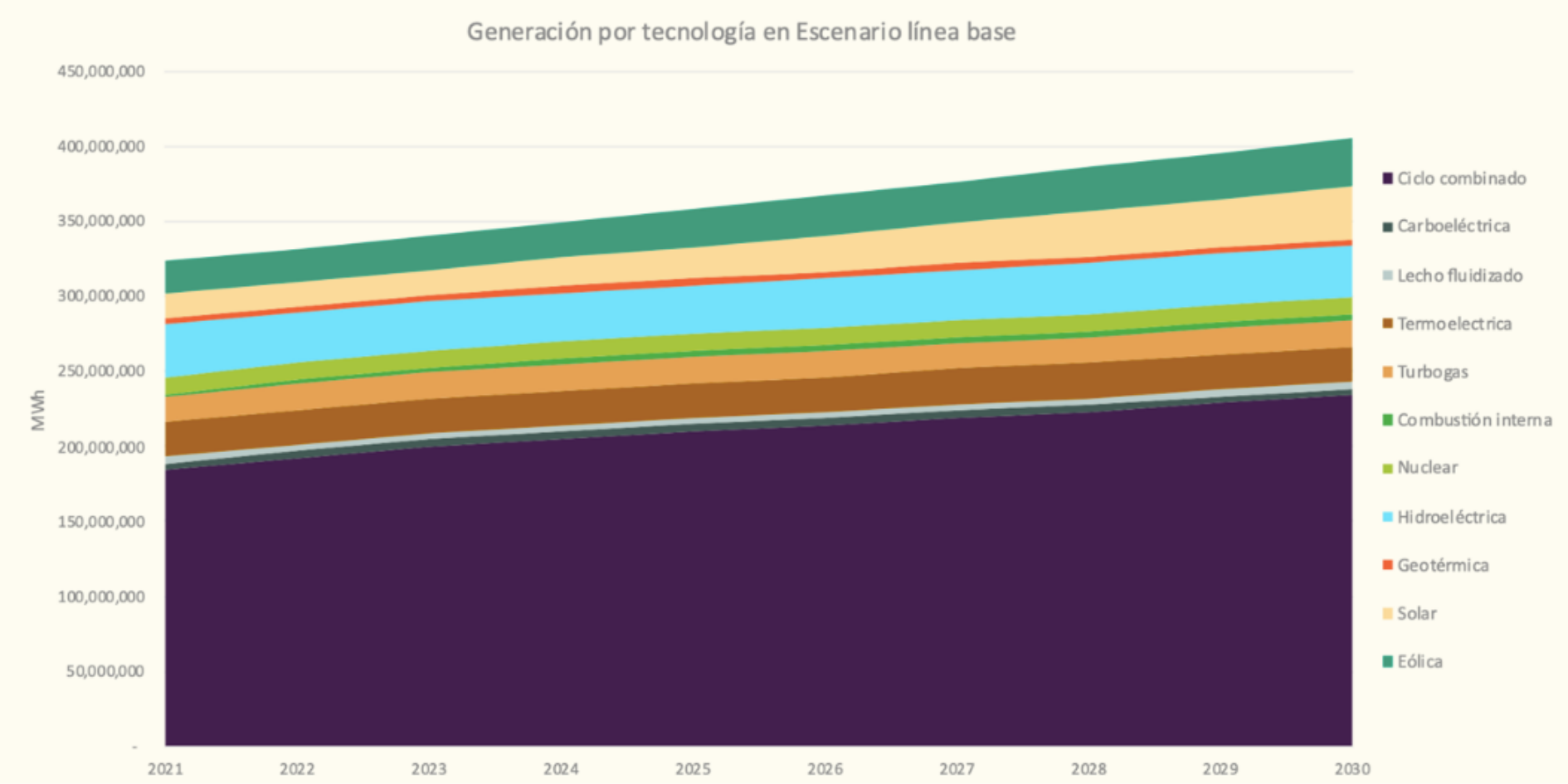
Figura 4. Emisiones nacionales de **GEI** según el escenario tendencial (BAU) y las metas de reducción INDC comprometidas de manera no condicionada, 2013-2030.



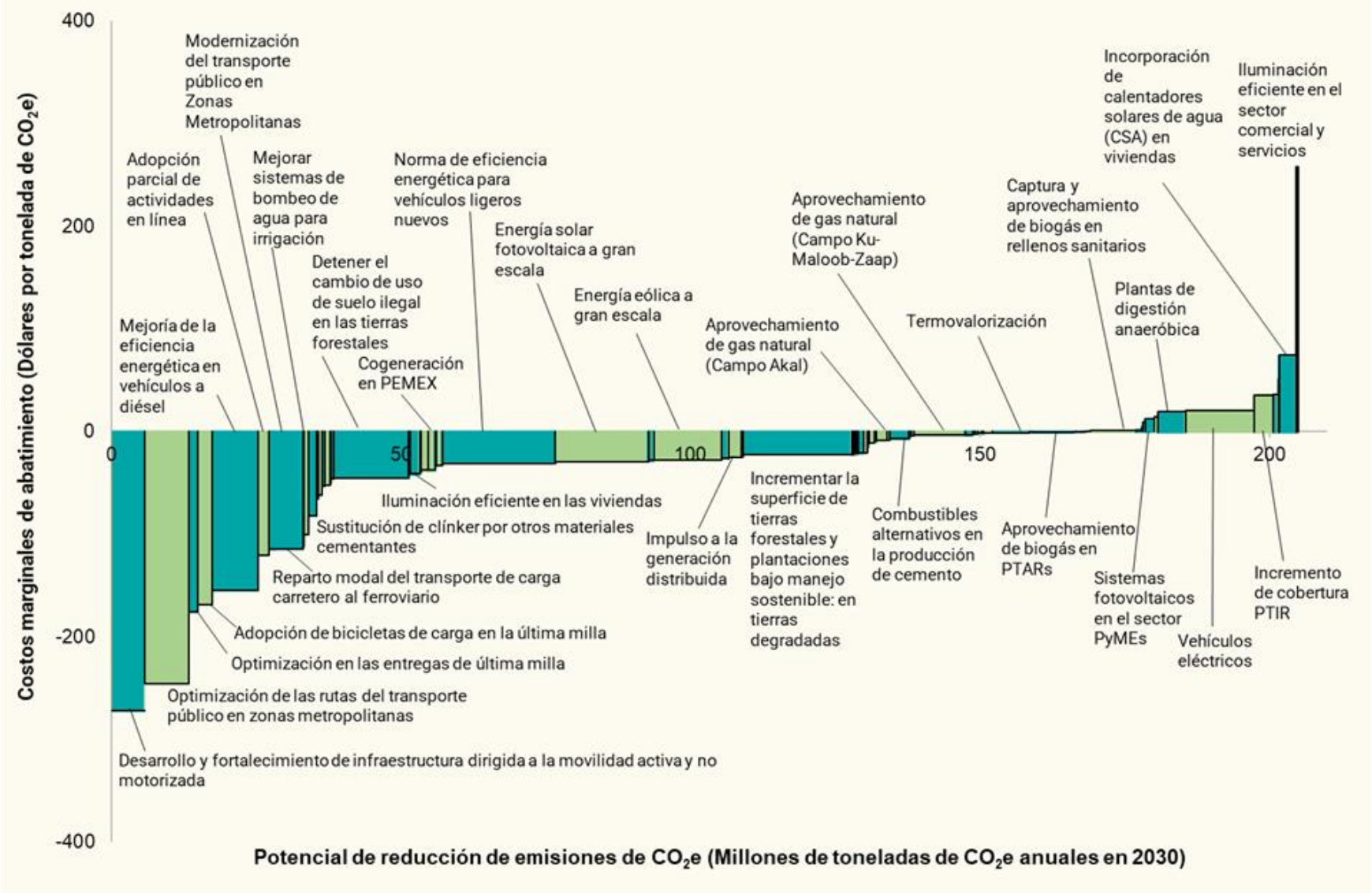
Source: [Mexico's Nationally Determined Contribution (2015)](#).

Baseline scenario 2030

Electricity generation by source (MWh)



Mitigation marginal costs



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Sectorial analysis: Energy

(Some) Mitigation measures on electricity (but…):

- Energy efficiency.
  - But governments (national and subnational) do not have sufficient resources for investing and private investment is discouraged.
- Incentives for clean energy generation.
  - But CFE is not willing (and lacks resources) to massively change from non-clean sources and competition is discouraged.
- Efficiency measures by sector (industry, commerce, agriculture, residential, government…).
  - But access to self-generation and independent electricity producers is limited by legislation, administrative practices and executive orders.

Sectorial analysis: Energy

How do we solve it?

- **Carrots:** CFE and PEMEX.
  - How to change them, but keep them in the game?
- **Sticks:** Exogenous pressure.
  - Other countries, international organizations.
  - Foreign investment (business).
- Creation of strong and long-term veto players
- **Societal demand**
  - How do we incentivize people to care and act upon it?
  - **Vision 2050:** less polluted environment, more sustainable ways of life, community life, more democratic governments.
  - Not only the end point (2050) is better, but also the trayectory is better.

Conclusions and Next Steps

- Following economically-socially and environmentally desirable trajectories to a decarbonized economy with good life for everybody will not be possible unless they have explicit popular support and the concerns of socio-economic actors that can block them have been addressed.
- Surveys and interviews (willingness to pay)
- Compensation measures