

Assessment of the sustainability of Mexico green investments in the road to Paris

Topic: Thematic IO analysis: Energy and Environment

Author: Santacruz Banacloche S  nchez

Co-Authors: Fabio MONSALVE, Maria Angeles Cadarso, Yolanda LECHON

Mexico is expected to rank among the top-ten largest economies in 2030 and to become the 6th in 2050 (PwC, 2015). According to EDGAR database, in 2012 it was the second largest polluting country in Latin America and the 10th in the world, regarding Greenhouse Gas (GHG) emissions. To meet the Paris Agreement, Mexico's INDC - 'Intended National Determined Contributions' - is committed to reduce unconditionally 25% of its GHGs and Short Lived Climate Pollutants emissions (below BAU) for the year 2030. Since the strategy to achieve the mitigation goals needs an increase in renewable energy sources, Mexico's national climate change policy package has already been launched. A keystone of Mexico's green strategy is the increase in renewable energy sources throughout an ambitious program that imply the deployment of 20.3 GW of wind energy, 1 GW of biomass 11.8 GW of cogeneration and 2.2 GW of geothermal energy and 1.5 of solar energy.

In this context, this paper assesses the 'green' energy investments required for the expected increasing capacity of renewable energy and their impact on production, value added, and employment by qualifications, materials, water and CO₂ emissions, by using the input-output analysis in a multiregional framework for estimating direct, indirect and induced effects of Mexican policies in the period 2012-2025. The green investments would imply an expected mitigation around 55 Mt CO₂ (SENER, 2015), once the new facilities are fully deployed. However, their construction phase as well as their operation and maintenance will increase emissions that should be accounted in order to achieve the planned emissions peak. In addition, the mitigation strategy should be seen as an opportunity to improve the development of the economy. This is the reason for the assessment of the planned investments looking for the three pillars of sustainability: economic, social and environmental.