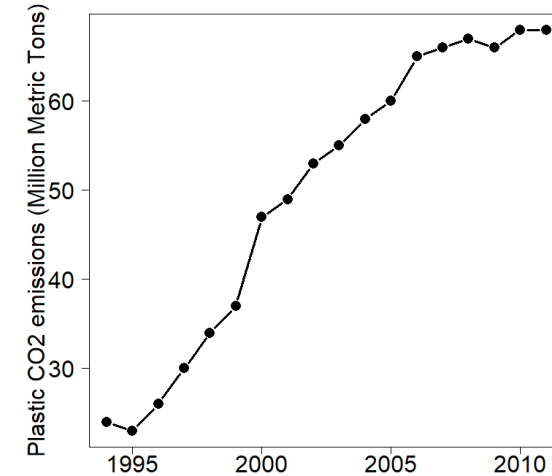


The carbon footprint of Mexican plastics.

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Global carbon emissions from plastic generation, transport and disposal accounts for 4% of all current GHG emissions and could be as high as 15% by 2050. As a result, there has been growing interest in analyzing and understanding national level trends of plastic emissions, in order to generate policy-relevant information. In this work we estimated the carbon footprint of plastics in Mexico over 1994-2011. We computed information on plastic generation, import and export by type of plastic (9 categories) annually for the whole country and use the data to feed a material flow box model. Using data of the individual carbon content, mean lifetime and recycling percentage we computed the carbon emissions for each plastic type. We estimated an average carbon footprint of all plastic of 48.2 million metric tons per year or about 10% of all national emissions, with a trend of +2 million metric tons per year. From this, 14% came from PEAD and 12% from PET plastics, commonly used in water bottles and food packing while 15% from PEBDL plastics, used mostly for plastic bags. **Our work, shows that policy oriented at reducing plastic wrappings for food products and water bottles, may represent an efficient way of reducing carbon emissions from the plastic industry.**



Plastic flow during 1994-2011 in Mexico
(Million Tons of plastic)



Total accumulation: **106,902 Million tons**

Average emissions
48.2 Million metric tons CO2

PLASTIC CO2 CONTRIBUTION BY TYPE
1994-2011

