



PANEL 4

SOLAR ENERGY IN LATIN AMERICA: TODAY AND TOMORROW

THE CASE OF MEXICO

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ANES is the Mexican section of ISES, so ... ANES = ISES Mexico

It is the leading civil association in Mexico for the promotion, dissemination, development, education, and training in renewable energy.

The Association has about 800 active members, including scientists, professionals, industry representatives, students, and other people interested in **solar** and all renewable energies.

Since its founding, ANES has held an annual congress without fail. Next year we will be holding the 50th Congress! All of you are already invited!

The former congresses includes the ***Millennium Solar Forum***, held in September, 2000, and the ***ISES SWC 2013***, celebrated in Cancun.

ANES is the civil association that serves as the official spokesperson before various government agencies, such as the **Ministry of Energy**, the **National Commission for the Efficient Use of Energy**, the **Energy Regulatory Commission**, among others.

Chapter 13

The Mexican Section of the International Solar Energy Society

by
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Abstract

MEXICO

Country data

Territorial Area: **1 964 375** sq km

Population: **132** million

Electric Sector

Installed Capacity (2024): ~ 100 GW

Electric Generation (2024): ~ 375 TWh = **1,35 E J**

Final energy consumption: ~ 5,26 E J



1,64% of the world's population

1,34% of the global CO₂ emissions

1,33% of the world's land area

0,3% of proven global oil reserves

0,1% of proven global gas reserves

Energy consumption in Mexico by type of secondary energy

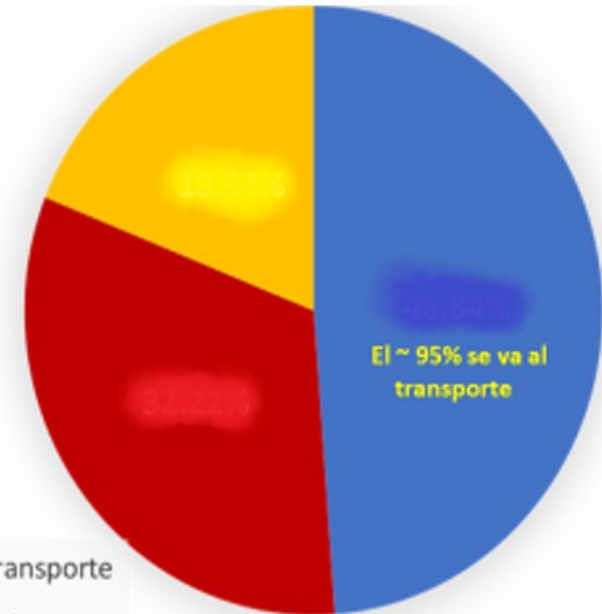
Final energy consumption in 2023 in Mexico was **5,26 EJ** in the following types of secondary energy sources:

✓ Gasolines	→ 1,617 PJ
✓ Electric energy	→ 1,107 PJ
✓ Diesel	→ 866 PJ
✓ Nat. Gas	→ 436 PJ
✓ LP Gas	→ 388 PJ
✓ Biomass (firewood)	→ 291 PJ
✓ Kerosene	→ 198 PJ
✓ Petroleum coke	→ 141 PJ
✓ Coal	→ 90 PJ
✓ Solar thermal	→ 67 PJ
✓ Coal coke	→ 43 PJ
✓ Fuel oil	→ 17 PJ

Official data can be found in the annual **National Energy Balances** published by the **Ministry of Energy** of Mexico

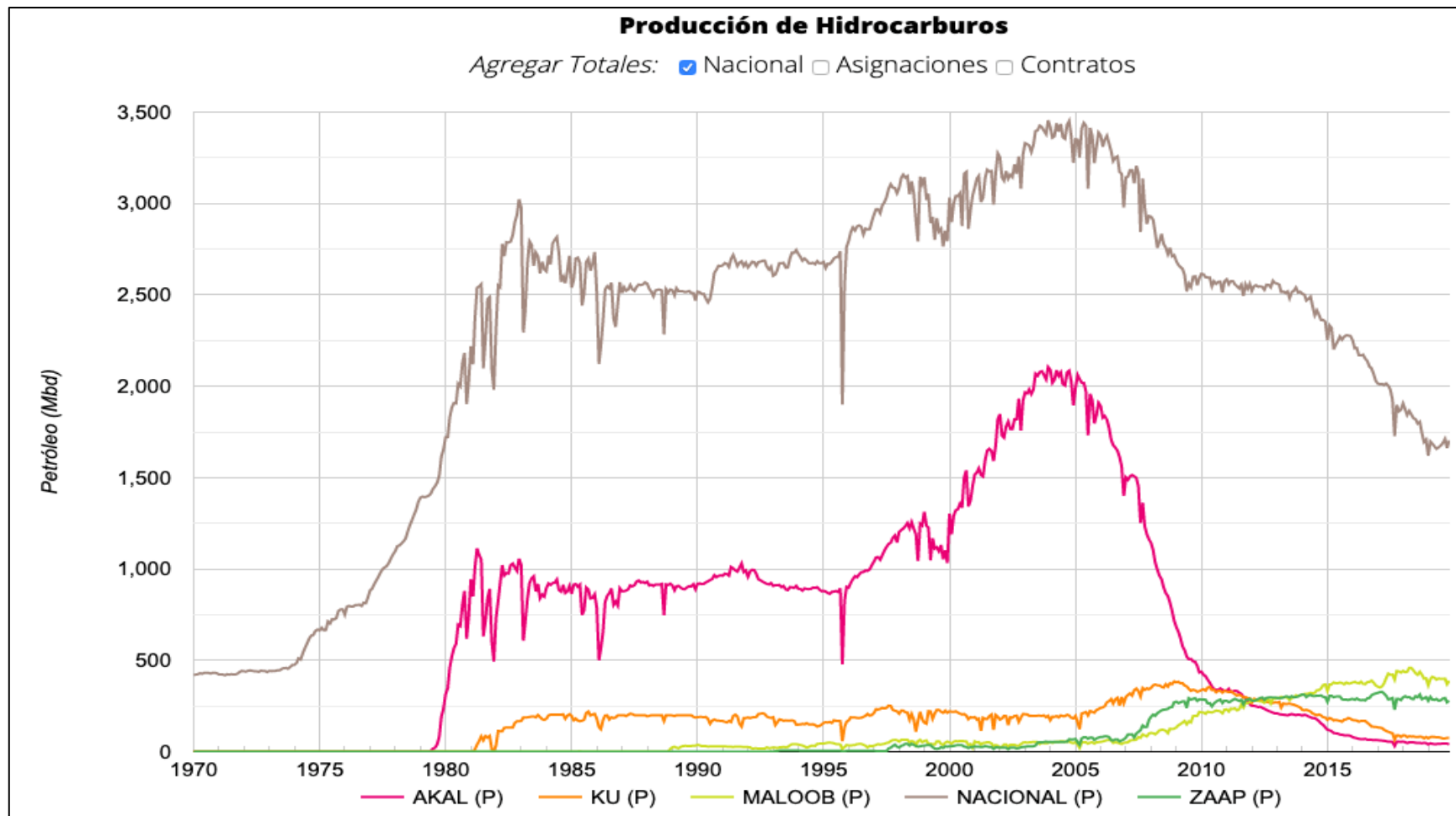
48.84%
30.02%
21.14%

■ Combustibles para transporte
■ Combustibles para calor
■ Electricidad



Oil supply **CANNOT** grow in Mexico !

The decline in hydrocarbon production in Mexico





The official plans regarding electricity appear in the *Electricity Sector Development Program* (PRODESEN, in Spanish) which, with a 15-year horizon into the future, is updated year after year.

Perhaps the only positive aspect of Mexico's current energy situation is that, for the very first time, we have a President with a PhD in Energy Engineering who clearly understands the urgent need to make the entire national energy system more sustainable.

Thus, very recently, more than 10 federal laws on energy matter have been modified, aimed at sustainability and energy sovereignty.

It is expected that by 2030, more than 15 GW of photovoltaic capacity will be installed, along with at least two central-tower solar plants, more than 15 GW of wind power, and about 1 GW of geothermal capacity.

Likewise, in the transportation sector (the largest energy consumer), several thousand kilometers of new railway lines will be built for electric passenger and freight trains.



Thank you so much!

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