

México Steel Industry **and The “Green House Gas”** **Reduction Program**

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The Steel in Our World



Steel is 100% recyclable
13 years cycle!

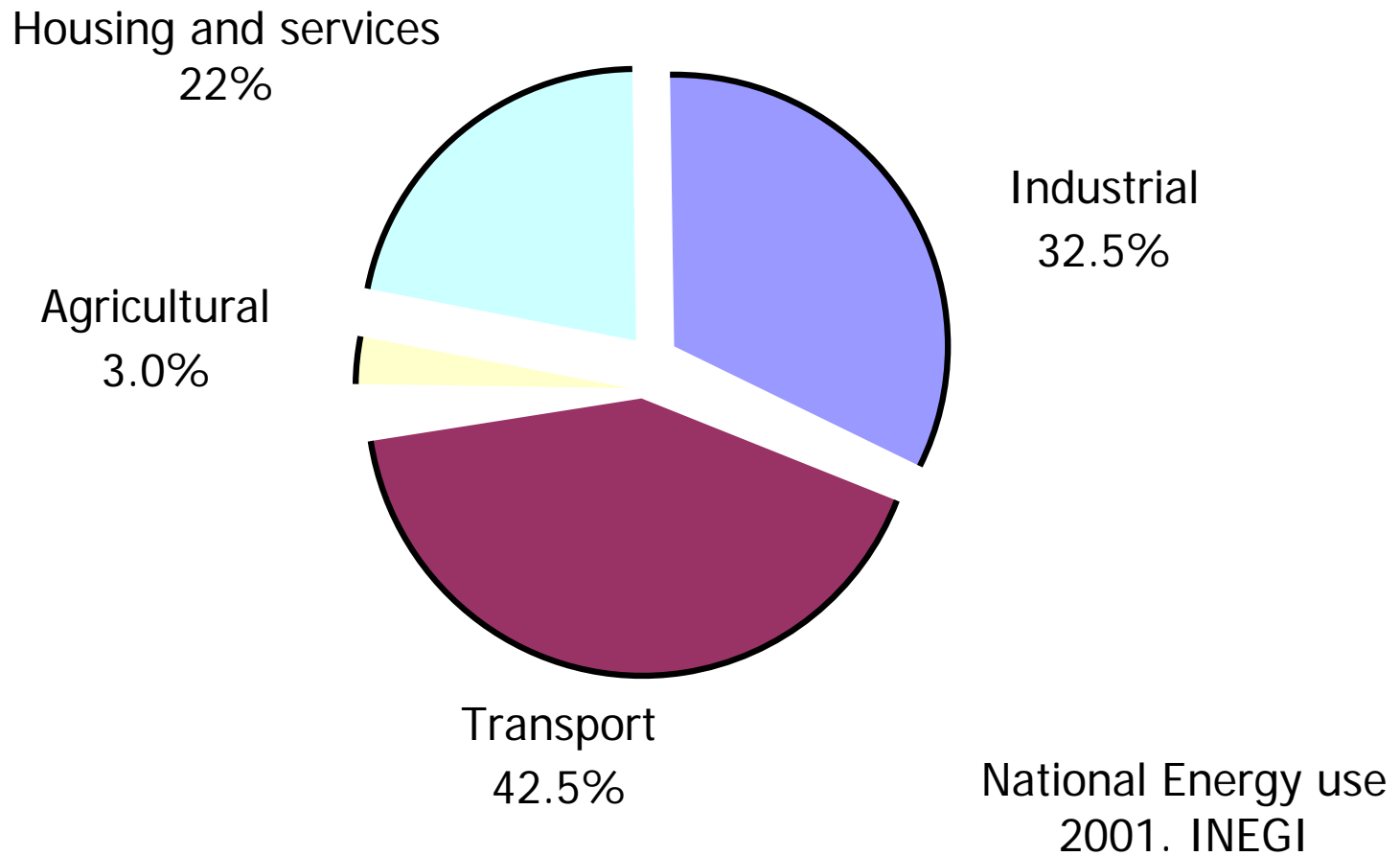
- **Have you think on modern life, without steel?**
- Economic value based on natural resources.
- Base of many steel manufactured products; construction, transportation, home appliances, among others.

Industry

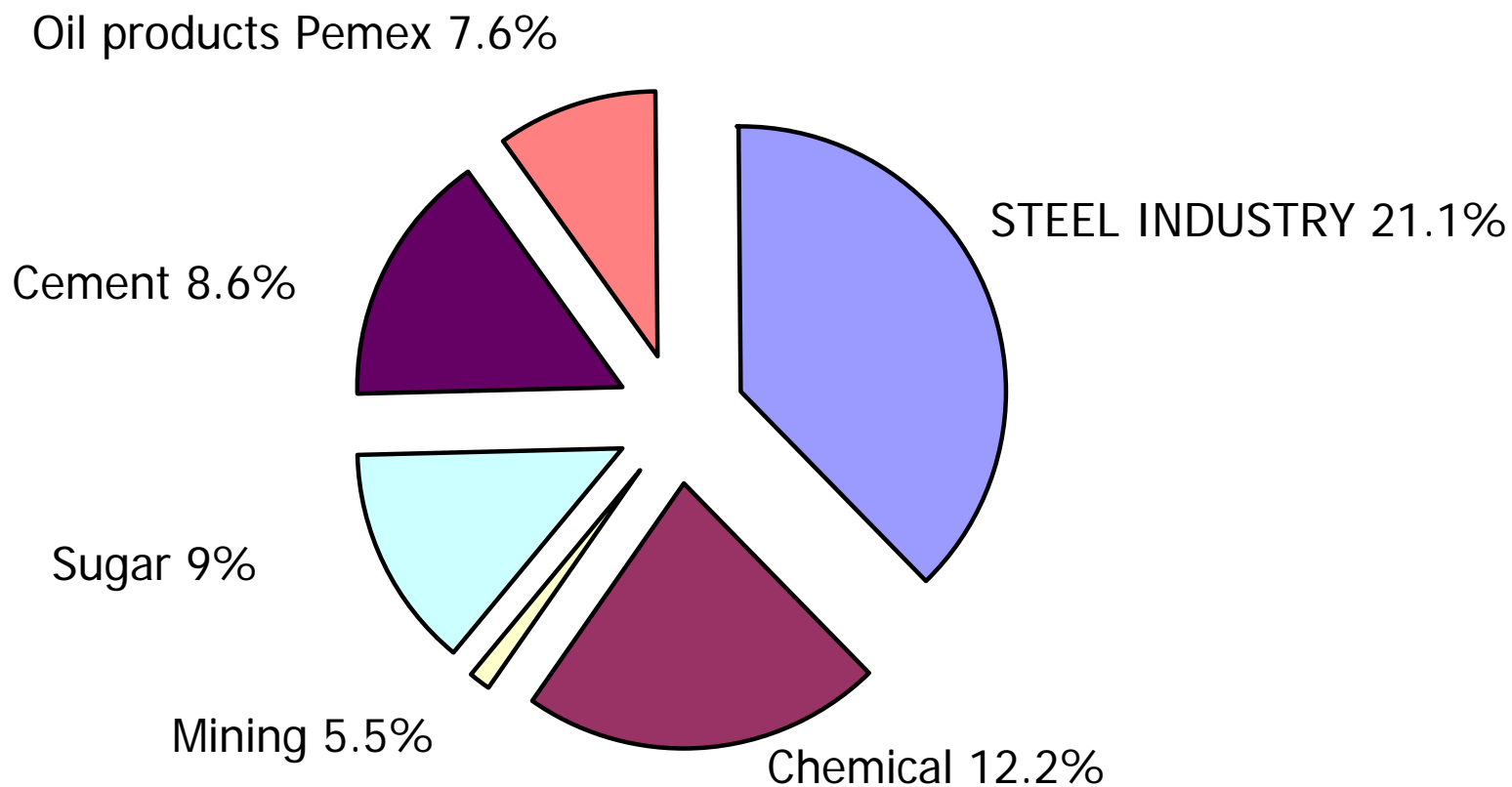
- 2% of GNP; 7% industrial NP and 10% of manufactures
- Employment; 600,000 (direct & indirect)
- Exporting to 99 countries
- 16th world place in production
- Last 12 years investment: \$ 6,500 MMU\$
- Second Mexico's consumer of Natural
- First private power consumer
- 18 mill tons.; production capacity



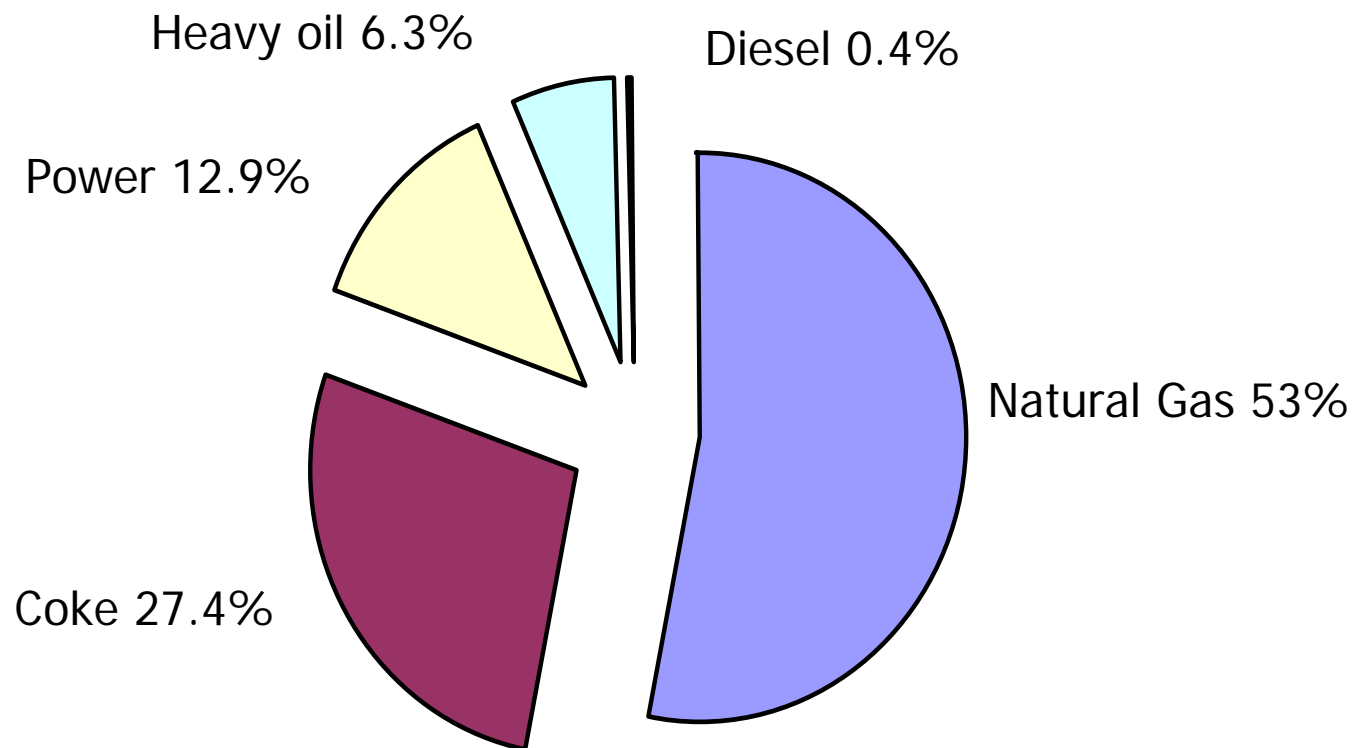
National Energy Usage



INDUSTRIAL ENERGY PARTICIPATION



Steel Industry Energy Sources



Per Capita Steel Consumption

Liquid Steel

		Consume 01 (MT/A)*	Kg. Per cápita '01	Kg./ GNP '01
NAFTA	México	18.7	183.9	50.3
	E.U.A	114.2	401.3	12.7
	Canada	16.9	543.8	23.2
EU	Germany	39.411	478	14.5
	Spain	9.9	494	27.5
	Italy	32.7	564	26.5
PAC	Japan	75.0	589	13.1
	Korea S.	45.0	850	66.1

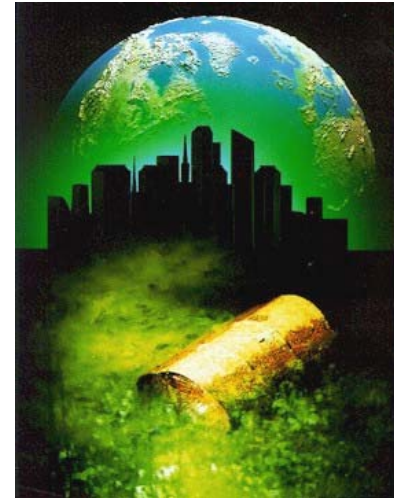
Source: Environmental Indicators (OCDE) 2003; IISI Statistical Year Book 2002

* Millions de tone Ladas al año.

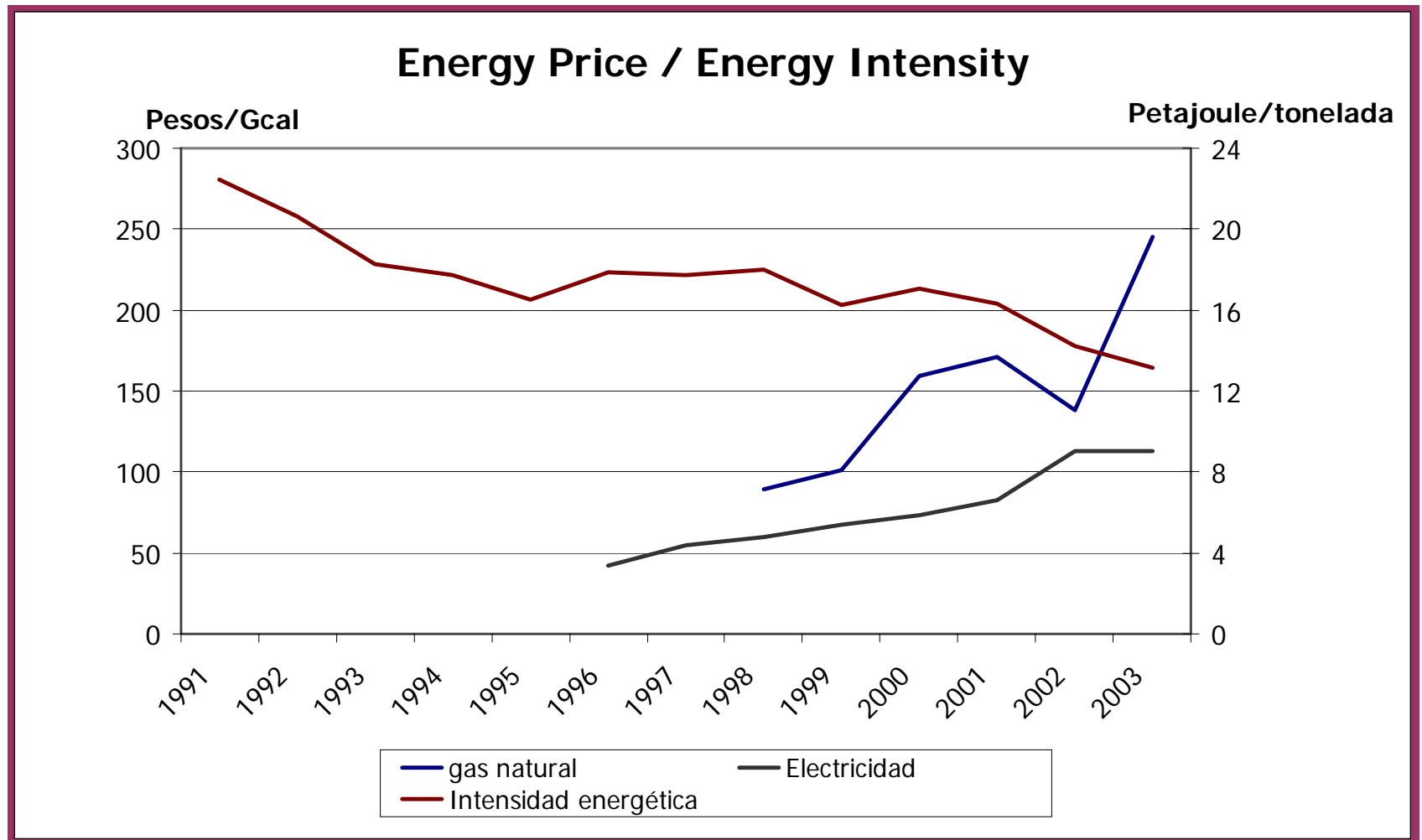
Capital Intensive, complex technology.

STEEL Industry Environmental Activity

- Investment '89 to '06; 9,200 Mill. MUS\$
- Production '95 to '02; 12 to 18.9 Mill. Ton., **60%** GNP (**30.0%**)
- **Environment**
 - 23 to 25% of the total investment
 - PROFEPA; "Industria Limpia" ; 80% of the production.
 - **ISO 14001**; 1st certification in México.
 - Millennium Business Award for Environmental Achievement (UNEP - ICC),
 - **Reduction of energy intensity aprox. 25%. Of total.**
 - Agreement **SEMARNAT – CANACERO; CONAE - CANACERO.**



Energy Productivity



Green House Gas Reduction

- High energy cost .
- Since privatization, Investment in modernization rose 9,200 mill U\$.
- Energy management and investment reduces nearly 25%, from 92 to 03.
- SEMARNAT – CANACERO; “Inventory voluntary program”, has a first rough estimation of 16.9 mill Tn of CO2 emission.

GHG Voluntary Program Opportunities

- Identified potential reduction of ~5%
- Fair application of the principle of additionality (steel industry sectorial approach)
- Culture Change and its measurement