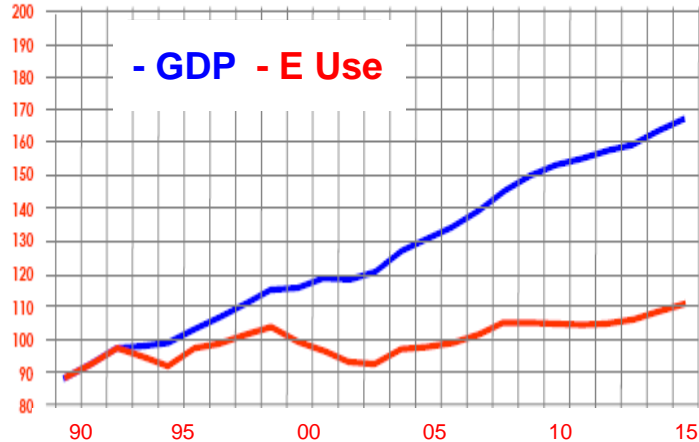


Energy Efficiency and NCRE: A Needed Country, State and Industrial Policy Program

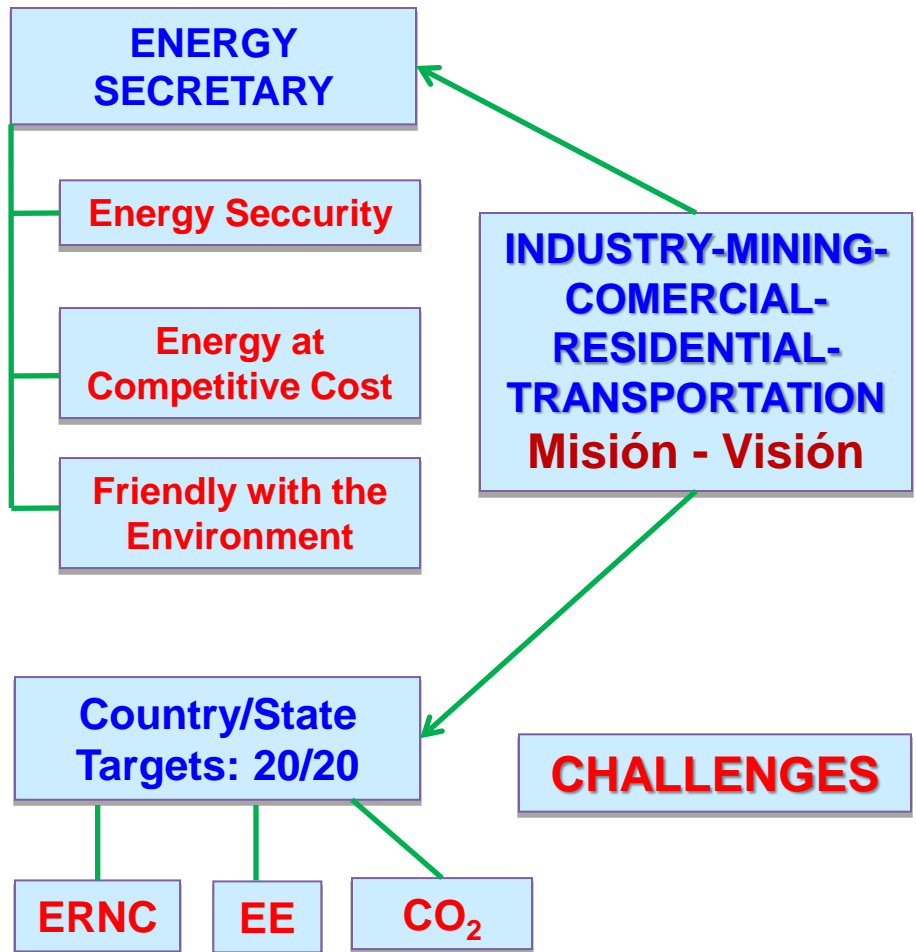
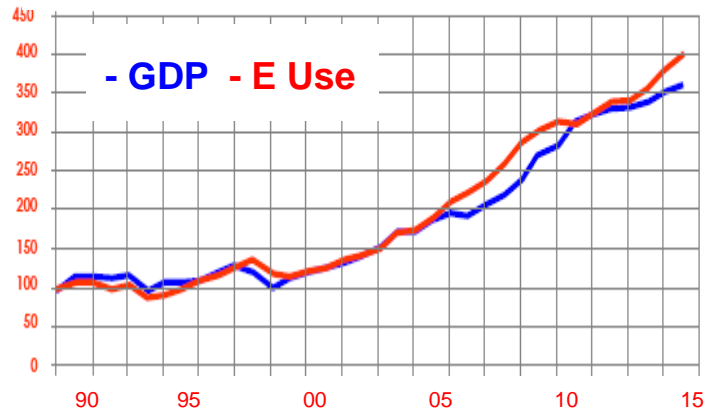
***Dr. Cristian Cardenas-Lailhacar
Universidad Yachay, Urcuqui – Ecuador***

Energy and Development

Energy and Development OECD

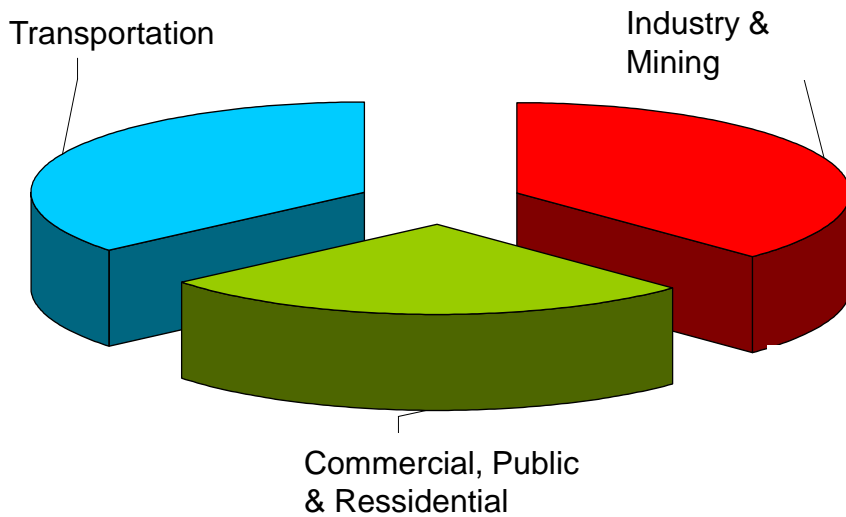


Energy and Development Lat Am



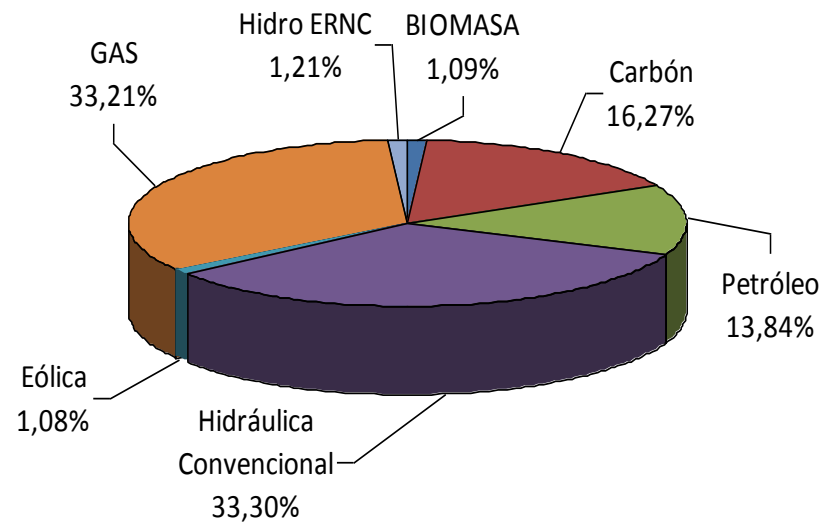
Energy Consumption: NEB

Typical Energy Use Distribution

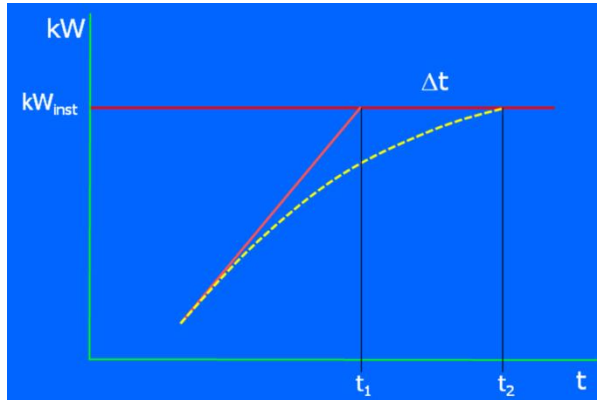


- Growing Energy Demand
- High Costs of Fuel: short – mid term
- High Costs of electricity
- The need of a diversified Energy Matrix
- High Dependence on Imported Fuels

GHG Emissions GEI: Annual Growth Rate 1990-2013	
<i>OECD</i>	0.93
<i>Latinamerican Average</i>	3.08
<i>The World</i>	1.90



Not a Company Only EMS Strat Plan



ISO 50001

Energy Policy

Energy Team

Training

M & V

Implementation

Diagnostic

Diagnostic:
 Audits
 Benchmarking
 Tariffs
 Metrics
 Sustainability

Implementation:
 Conservation
 EE & Load Management
 Selfgeneration
 Carbon Trade

M & V:
 Metrics
 Use of E & ROI
 GHG Emissions
 Regulatory Issues
 Effect Stock Market

The Universities Role ?

INTER & MULTI R+D+I+e

