

“Wind of the coast” project

WP3 Exchange of experience and best practices

WORKSHOP 1 – THE POLICIES

Ravenna, 11th February 2010

***The energy production in the Province of Ravenna: the state of play
and the planning – best practice sharing***

By Province of Ravenna

The Province of Ravenna adopted his provincial energy plan according to the following objectives:

- 1. Energy saving and efficient use of resources***
- 2. Development and enhancement of renewables***
- 3. Decrease of polluting gases***
- 4. To lead local businesses toward green economy***

National and supranational framework:

Kyoto protocol (11th Dec. 1997)

Italian target: -6.5% on 1990 emissions by 2008-12

Emissions in 1990: 517 Mt CO₂

Target: 486 Mt CO₂ (-6.5%)

Emissions in 2006: 568 Mt CO₂ (+9.9%)

20 20 by 2020 - the European Commission main objectives:

- A reduction of at list 20% of greenhouse emissions by 2020;
- A reduction of 10% of emissions than 2005 levels by 2020 with regard the sectors non included in the exchange quota, such as building, transport, agriculture, waste (for Italy 13%);
- A share of 20% of renewable energy on final European energy consumption by 2020 (for Italy 17%);
- Minimum goal of 10% of bio fuel in transport sector by 2020 in each member state;
- 20% reduction of energy consumption by 2020 (energy efficiency improvement)

Regional framework:

L.R. 23 Dec. 2004, nr. 26

“It regulates the territorial energy programming as well as other energy issues”

It regulates the energy programming deeds/acts and operative interventions of the Region and local administration bodies, with the aim to promote the sustainable development of the regional “energy system” and guarantee the correspondence among energy produced, rational use and the “charge capacity” of the territory and the environment

The function of the Region (art. 2)

Approval, accomplishment, update of the Regional Energy Plan

The function of the Provinces (art. 3)

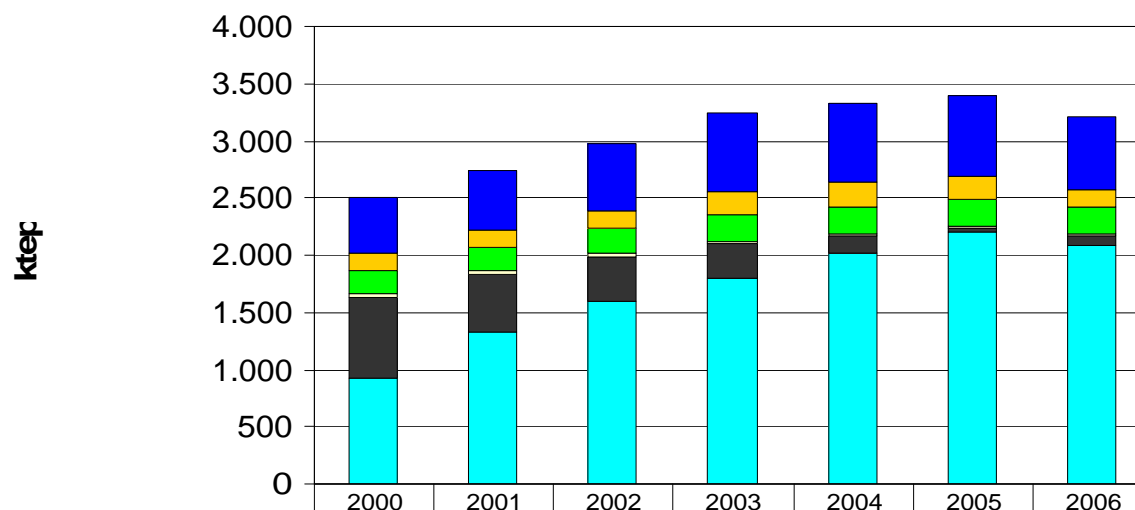
Approval and accomplishment of the plan for the promotion of energy saving and energy rational use; enhancement of renewable resources; development of provincial plants and grids also through their upgrade and/or adjustment

Documents composing the provincial energy plan

- ∨ Knowledge framework
- ∨ Summary of the knowledge framework
- ∨ Preliminary document
- ∨ Annex of the knowledge framework

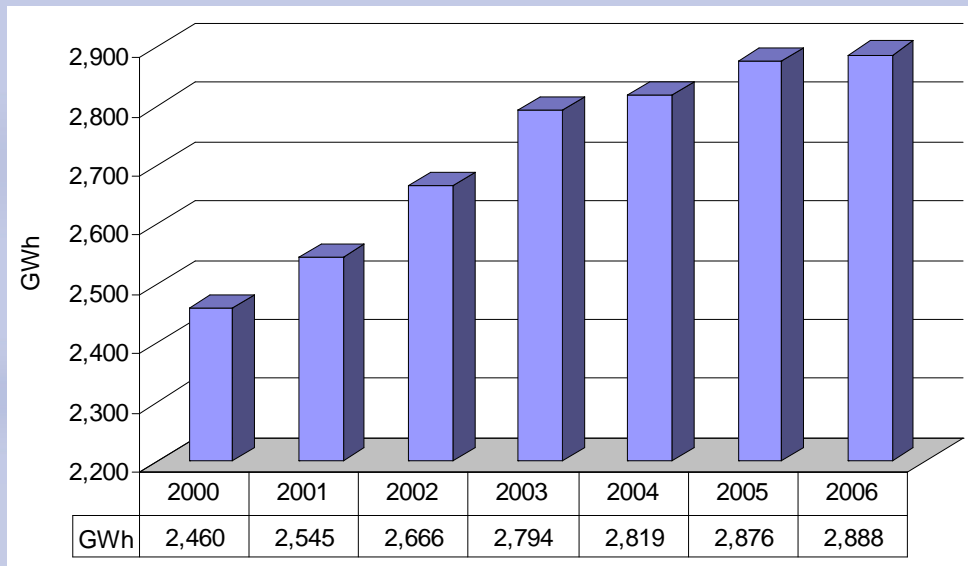
Summary of total consumptions in the Province of Ravenna

Consumi energetici totali



	2000	2001	2002	2003	2004	2005	2006
■ Gasolio	492,6	518,6	589,1	683,5	698,5	700,5	640,9
■ Benzina	146,5	149,7	157,3	210,8	210,5	195,6	142,3
■ Eletticità	206,6	213,7	223,9	234,7	236,8	241,6	242,6
■ GPL	36,1	30,6	27,7	24,1	22,5	21,4	20,5
■ Olio Combustibile e Lubrificante	703,9	499,7	391,9	292,9	146,0	27,0	74,3
■ Metano	920,0	1.330,0	1.590,0	1.800,0	2.021,7	2.201,7	2.086,7

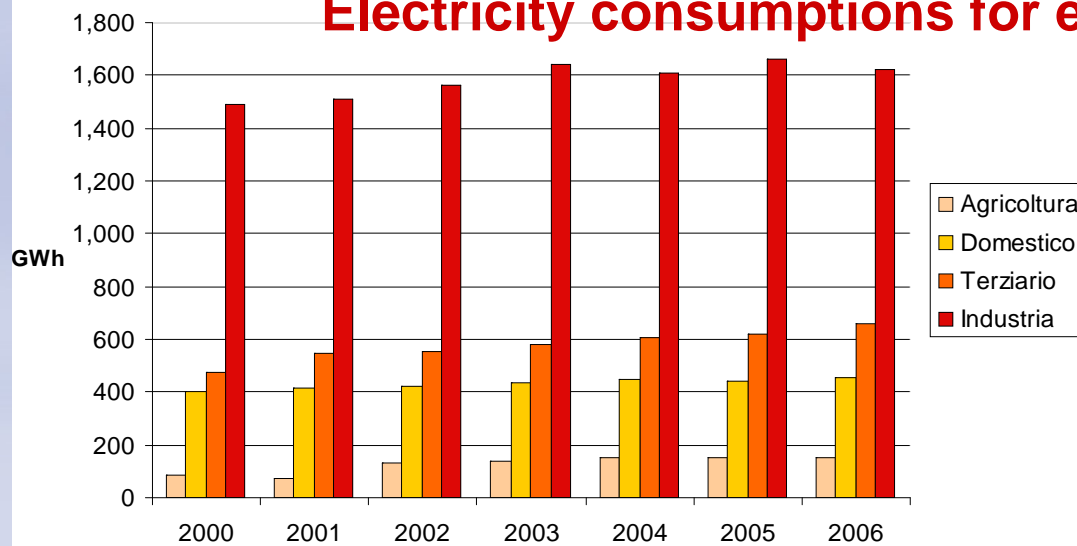
Fonte: Ministero
dello Sviluppo
Economico, TERNA



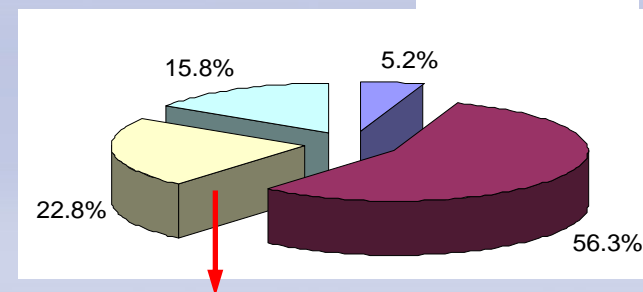
Fonte: TERNA

- Agricoltura
- Industria
- Terziario
- Domestico

Electricity consumptions for end users

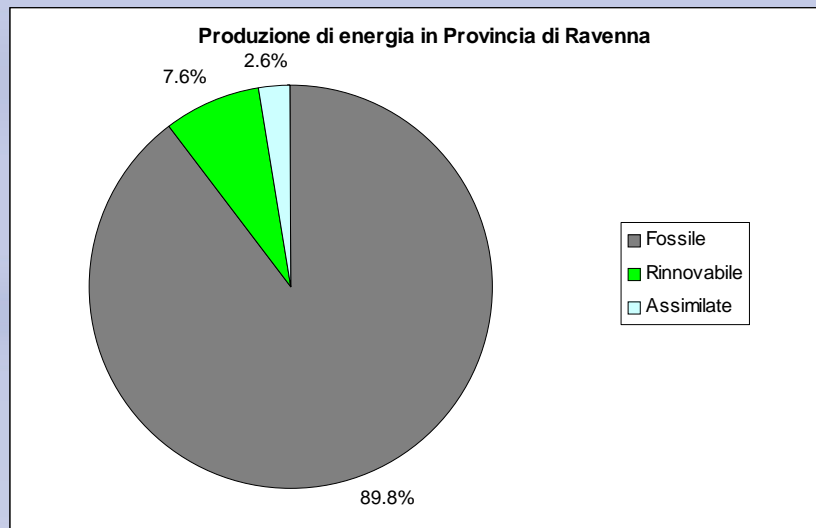


Year 2006

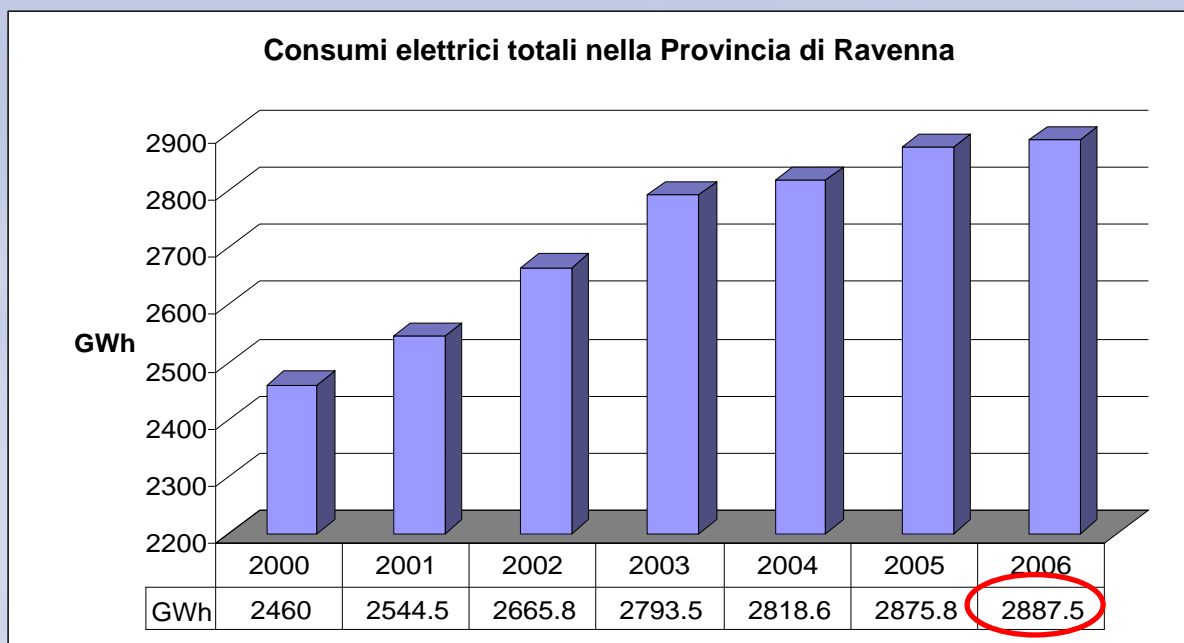


67% Trade, Hotels, restaurants, bars and other services

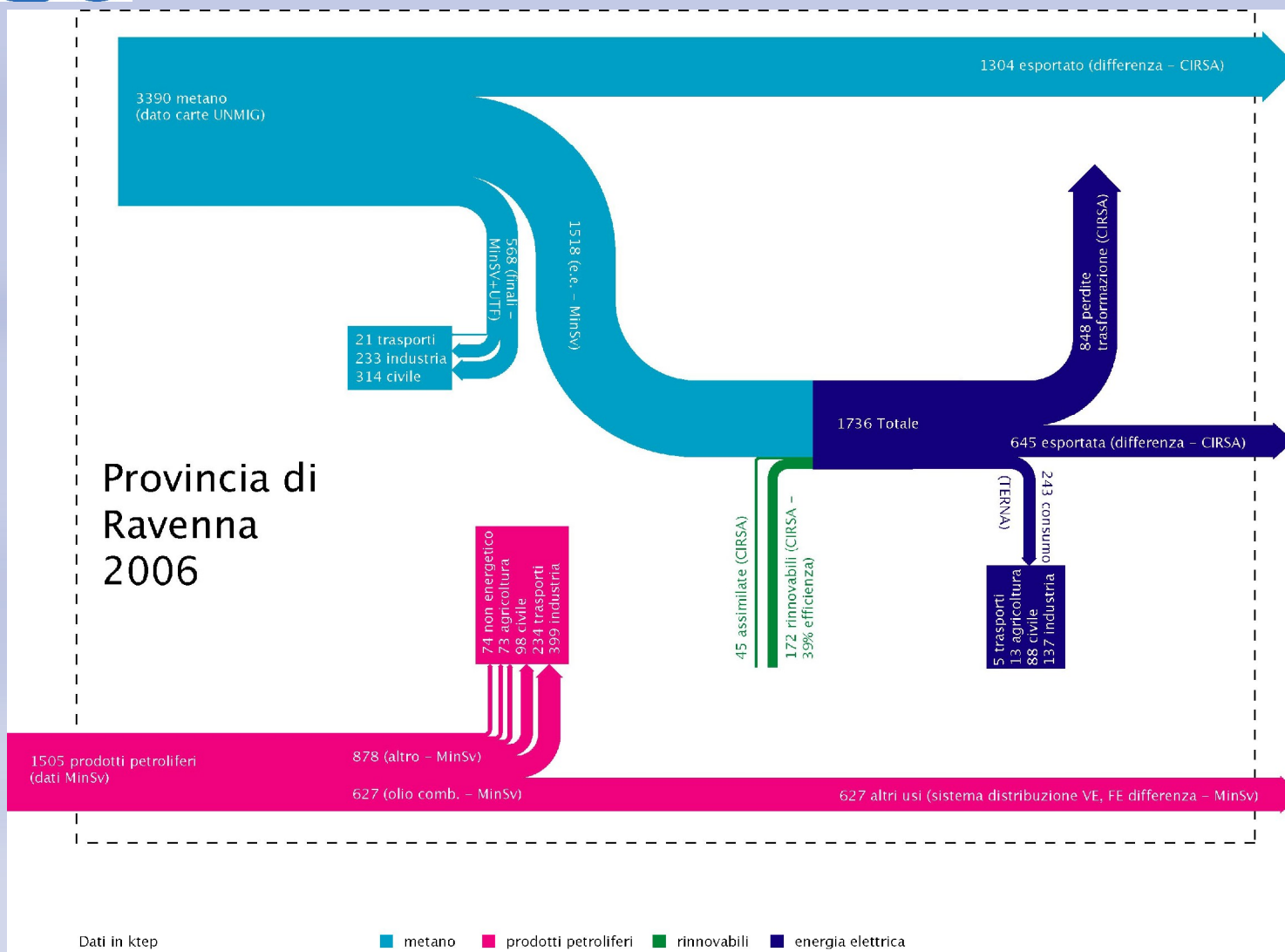
Tipologia di fonte	MWh(e) prodotti/anno
Fossile	9,265,805
Rinnovabile	782,200
Assimilate	269,071
Totale	10,317,120



Comparison with the consumption of electricity in the Province



Energy flows in ktep (2006 data; renewables 2008)



Axis of the Regional Energy Plan as guide line for the Provincial Energy Plan

AXIS	TITLE	REF. BODIES
AXIS 1	Promotion of energy saving and rational use in buildings and urban and territorial systems	Programme-plans of local administration bodies
AXIS 2	Renewable resources development	Programme-plans of local administration bodies
AXIS 3	Energy rationalization of industrial areas	Regional programme-plans
AXIS 4	Energy efficiency and reduction of polluting gases of transport/mobility sector (people and goods)	//
AXIS 5	Subsidies/aids in favour of agriculture and forestry	Regional programme-plans
AXIS 6	Research and technological transfer	Regional programme-plans
AXIS 7	Information and other services	Programme-plans of the region and local administration bodies

Axis 2 development of renewables *Objective and actions*

Objective: to produce further 280 ktep/year (4% from wind)

Actions:

- To set up a data base on solar thermal energy
- Subsidies for the installation of photovoltaic and solar thermal panels, and **small wind systems** by hotels and seaside resorts
- Communication campaign on thermal solar and **small wind systems**
- Intervention in the buildings owned by the Province and other public buildings
- Eco-industrial parks
- Solar thermal and photovoltaic panels installed on the roofs of factories and shopping centres
- Feasibility studies on **small wind systems** and small hydroelectric systems

Scenario

Renewable energy resources		
Source	ktep	t CO2eq
Wind along the coast and off-shore	10,5	27.768
Photovoltaic	4,1	10.792
Solar Thermal	1,2	3.052
Mini-hydro	0,3	877
Mix	228,4	607.733
Biomass	35,5	235.980
TOTAL	280	739.567

Gap between Kyoto goals and the state of play

