



# Enel Group Carbon Strategy

AEB Moscow 1<sup>st</sup> October, 2010

***Giuseppe Deodati***

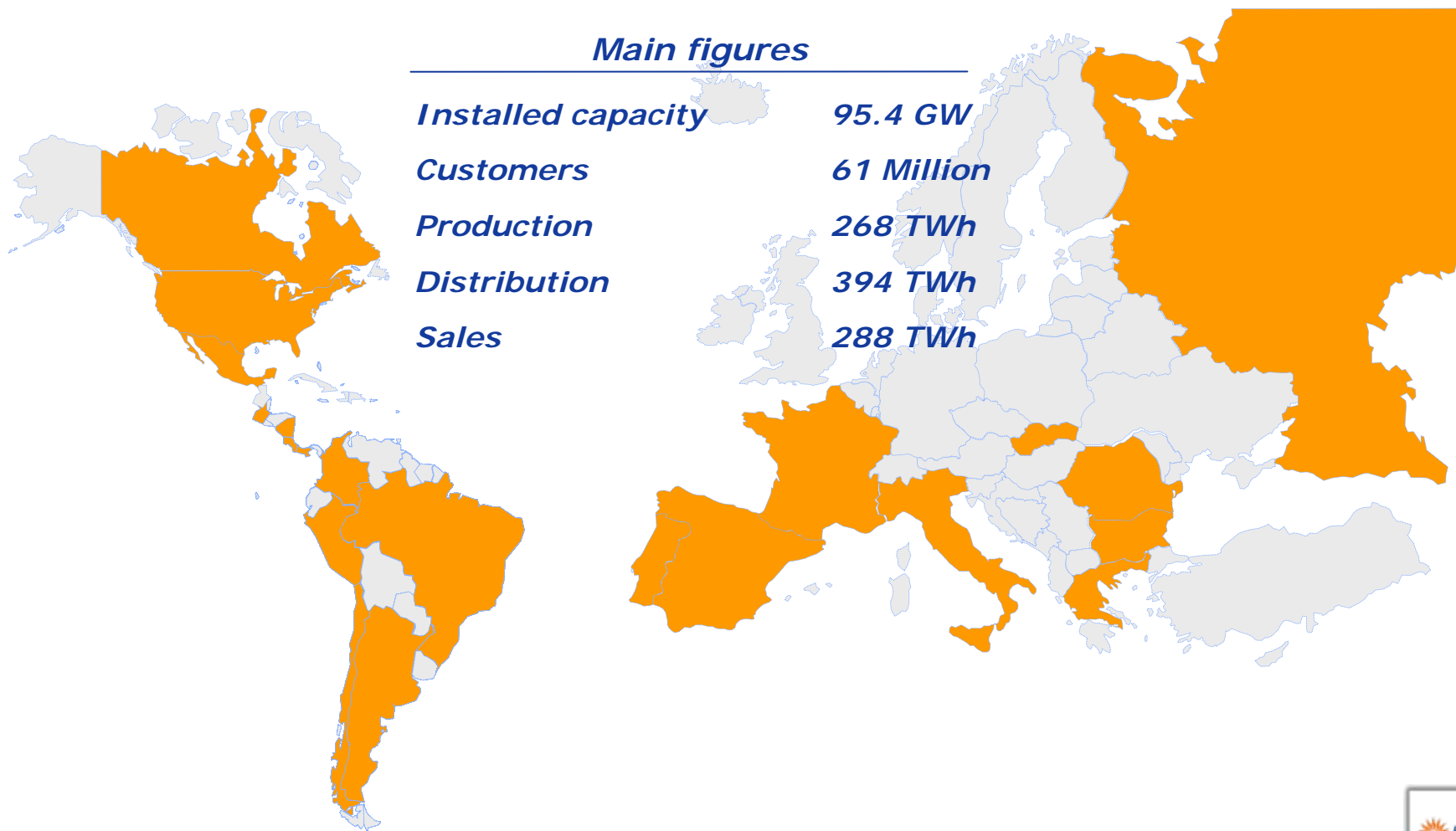
*D.ty Head of Carbon Strategy Unit*

*Enel Trade S.p.A.*

# Agenda

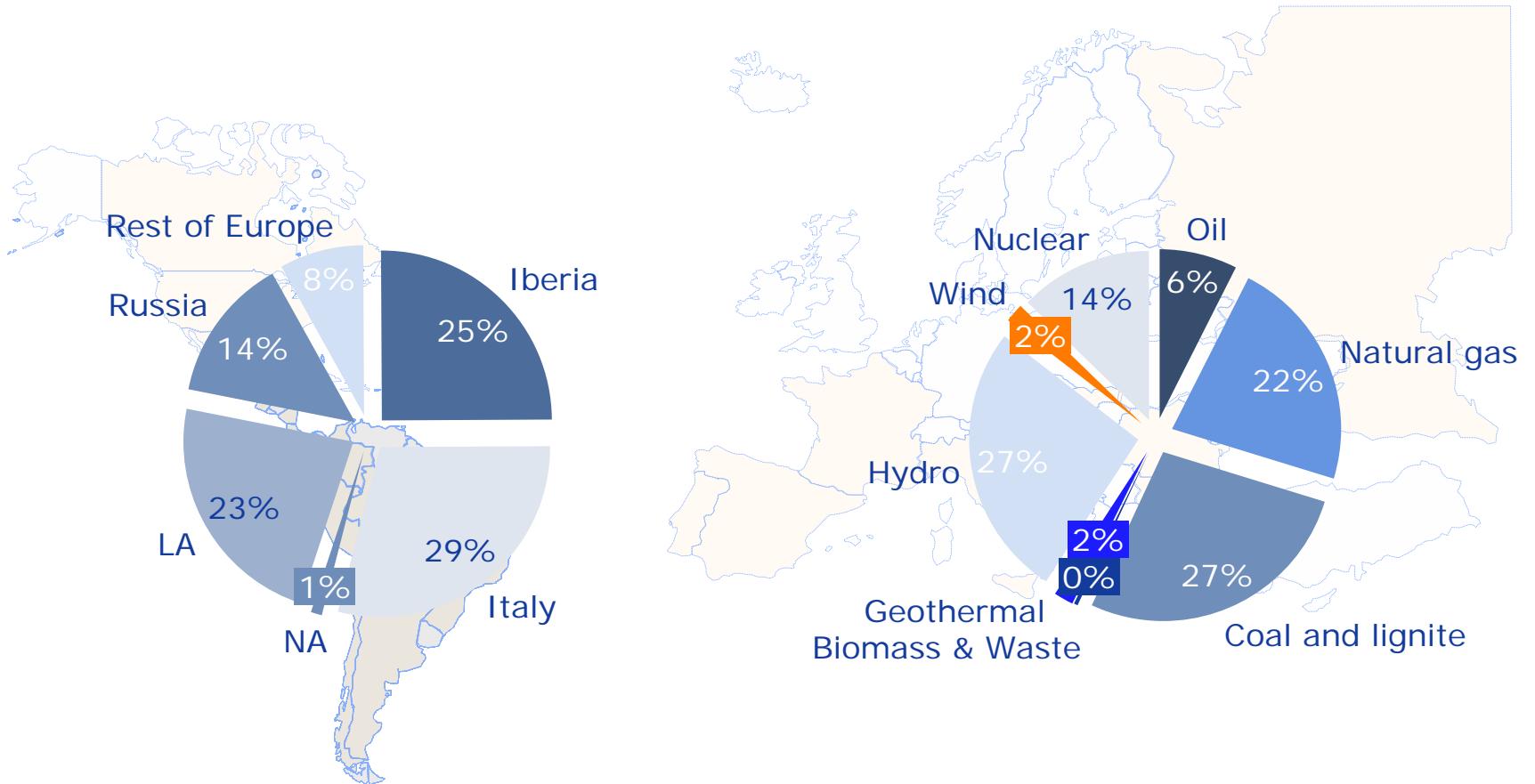
- **Enel Group overview**
- **Enel commitment in the carbon market**
- **Open issues on carbon regulation**

# Enel Group Overview



Enel operates in 23 countries as a global integrated energy player

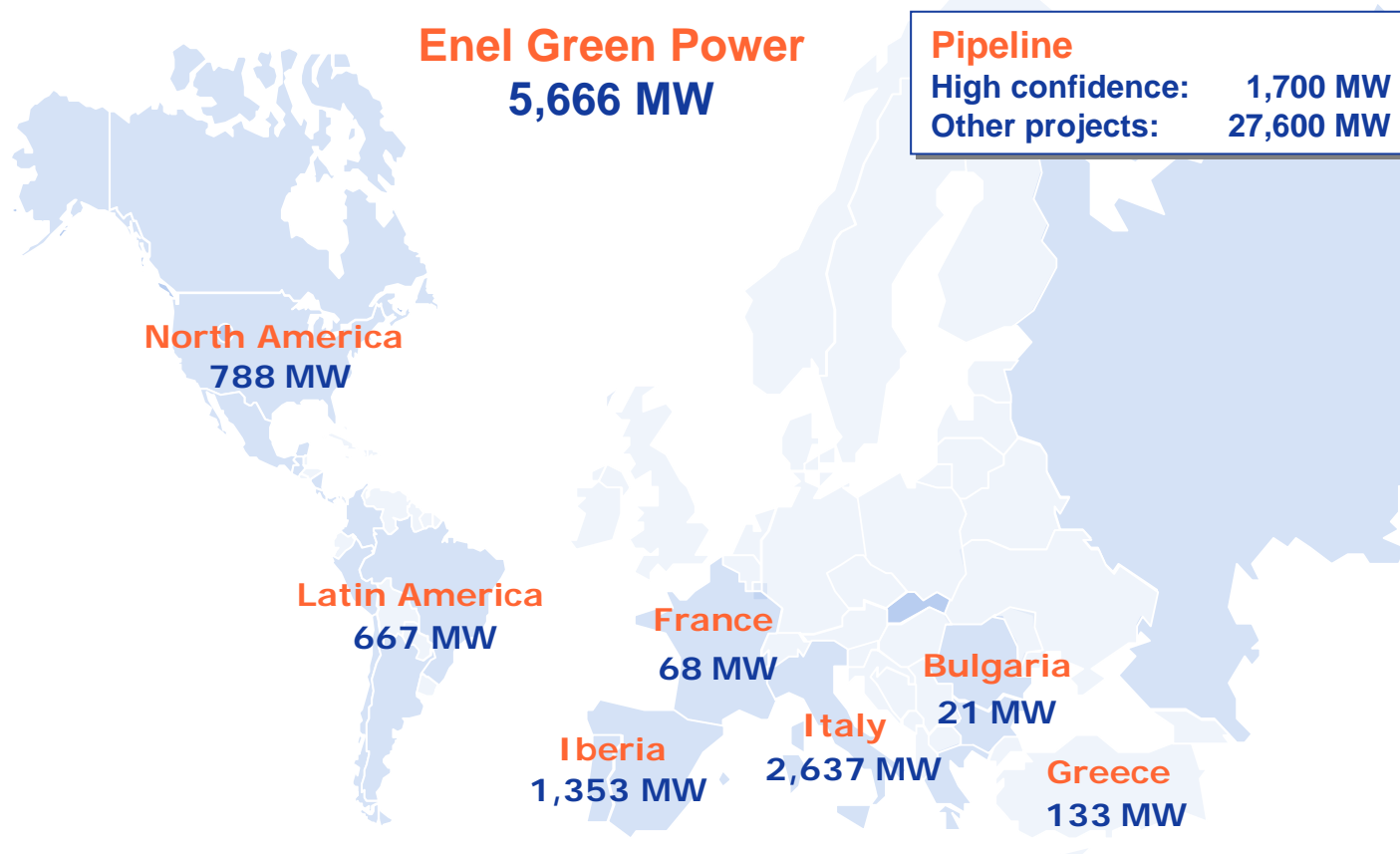
# Group generation mix and geographical breakdown



Enel Group has a well balanced mix of electricity generation

# Development of renewable energies

## Leadership of Enel Green Power



20,7 TWh total EGP Energy Production 2009



# Enel's strategy to tackle climate change based on 5 pillars

## Innovation

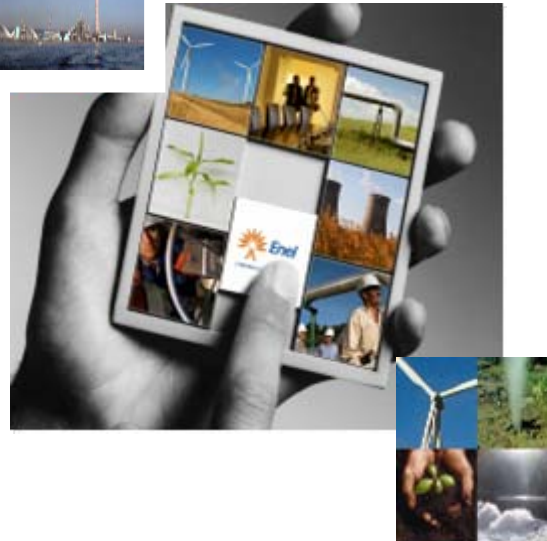
Best available technologies for thermal power generation



Research and innovation investments on new low carbon technologies

## Renewable Energy

Zero-emission sources, such as renewables and nuclear



## Research

Energy efficiency with smart grids

## Environment

Leadership in the global carbon markets of Kyoto Protocol flexible mechanisms

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# Enel ranking first among private CDM portfolios

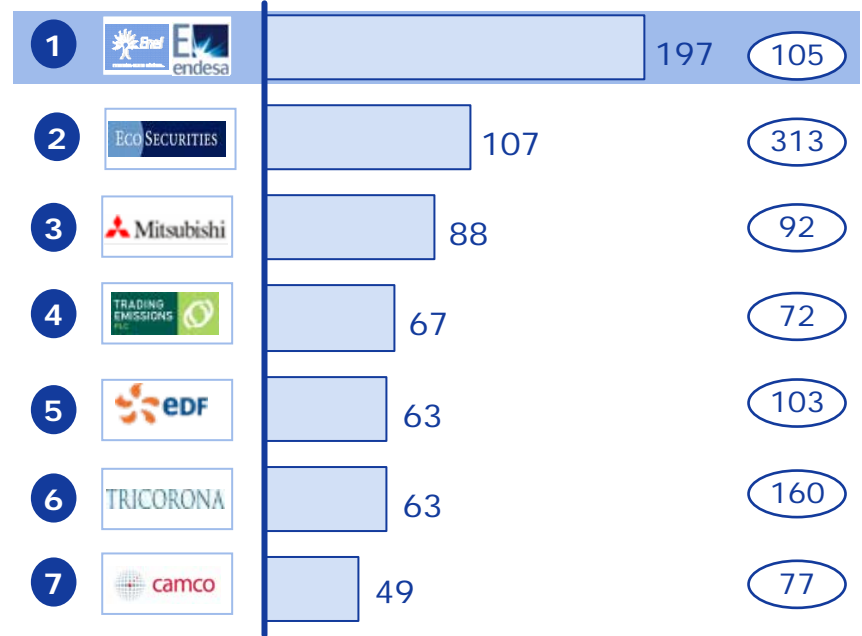
Enel carbon team presence in the world



Top private CERs portfolios

Nominal expected CERs 2012. Million Tm CO<sub>2</sub>

Projects Number



- Enel's Group has a global presence in offset generating countries.

- Enel's portfolio rank in the 1<sup>st</sup> position in the CERs market globally

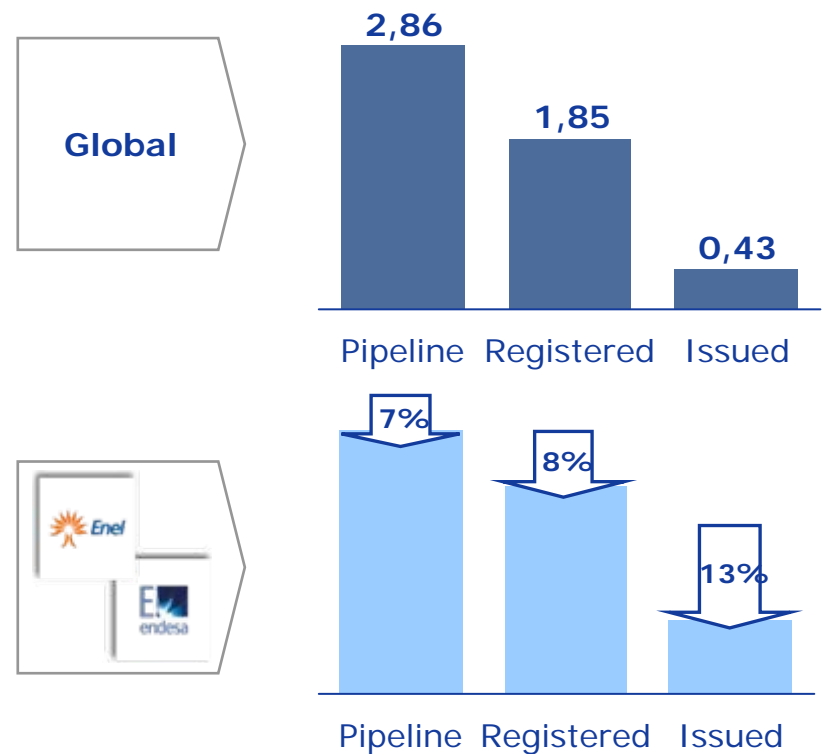


# Enel has a leading position in the carbon market

## Geographical presence CDM/JI Projects



## Potential Volume CERs (Gt)



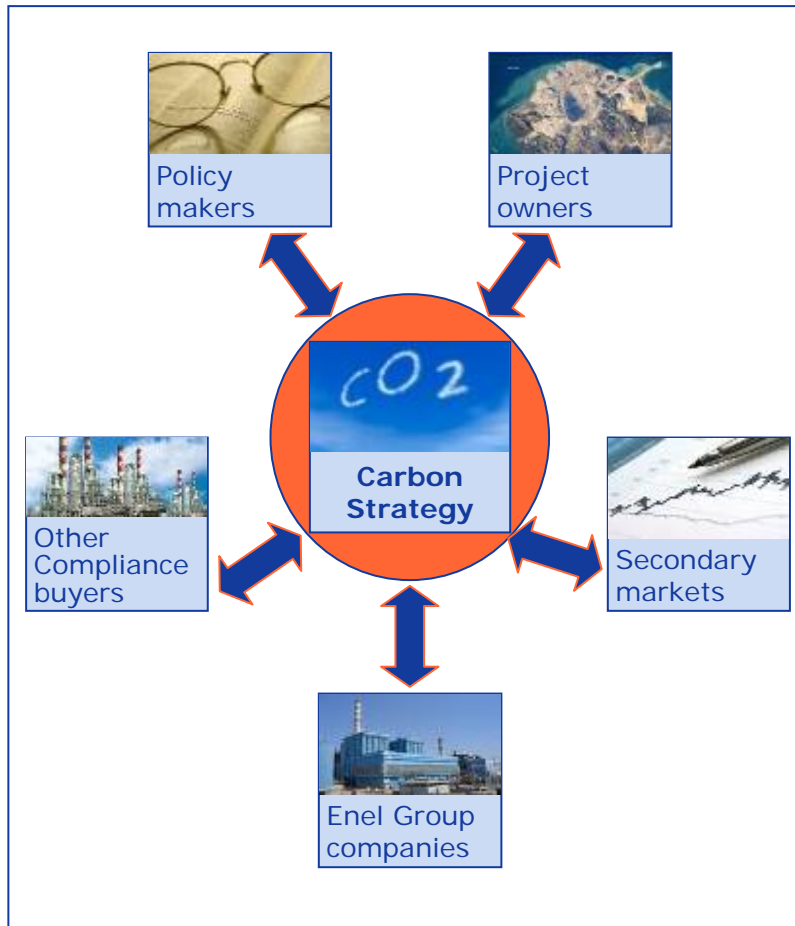
Source: UNEP, UNFCCC, companies' data

Enel CDM portfolio: an important share of the global market



# The new Enel Carbon Strategy Unit

Key priorities: compliance cost minimization and growth opportunities



1. Develop and execute the **compliance strategy** of the Group, minimizing the compliance **cost** while limiting the associated **risks**

2. Capture opportunities in the growing carbon markets addressing **third party needs** or **investing in profitable opportunities** within risk limits

# Enel Carbon Strategy Unit well positioned on main business models of carbon industry

Business model	Description
Compliance buyer	<ul style="list-style-type: none"> <li>Cover the compliance needs with a combination of EUAs and CERs, also developing CDM projects, minimizing the cost of compliance</li> </ul>
Offset developer (mid-upstream)	<ul style="list-style-type: none"> <li>Develop CDM projects and sell/hedge ERPAs or CERs either to final buyers or to other market operators</li> </ul>
Service provider	<ul style="list-style-type: none"> <li>Provide consulting/paperwork services to offset developers</li> </ul>
Financial player	<ul style="list-style-type: none"> <li>Provide structuring and risk intermediation services to other market players with liquidity or hedging needs</li> </ul>

## Enel Group positioning

..will include the major pillars of carbon business



# Key potentialities for market success from Enel Group's internal business

## Description

- 1 **One carbon strategy**
  - Convergence towards a **consistent and unified Group compliance strategy** for all compliance portfolios

- 2 **Active portfolio management**
  - Improving the **risk / return profile** of **compliance portfolio** by continuous monitoring and undertaking of optimization actions with a view on market and regulatory outlook

- 3 **Superior market view**
  - Leverage of **market insight** and **regulatory presidium** to develop a proprietary view of market trends

## Potentialities

- A centralized model ensures major **hedging** possibilities and strategic opportunities
- Huge compliance portfolio with **asset-back optimization** potentialities
- Superior **market view** to strengthen value creation potential

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# Open issues on future carbon markets regulation that create high uncertainty

## Key elements of uncertainty

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### Kyoto protocol – other new schemes

- Expiring of Kyoto Protocol in 2012: uncertainty on the signing of **global agreement post-2012** and/or emergence of **bilateral agreements** between countries
- **Implementation of emission trading schemes** or some other type of reduction targets in **other geographies**

### Phase III in EU-ETS

- Raise of cap to **30% reduction** target
- **Qualitative/geographical limitations** on eligible offsets types and technologies

### Offset markets

- **Reform of CDM markets** with streamlined approval process and additional technologies allowed
- **Emergence of alternative schemes** potentially reducing the role of private companies on CDMs



# Enel Group key recommendations on climate change

A global agreement with reasonable and achievable emission reduction pathways

Reasonable and achievable long-term targets including clear interim milestones

Progressive establishment of a global carbon market with stable regulatory framework

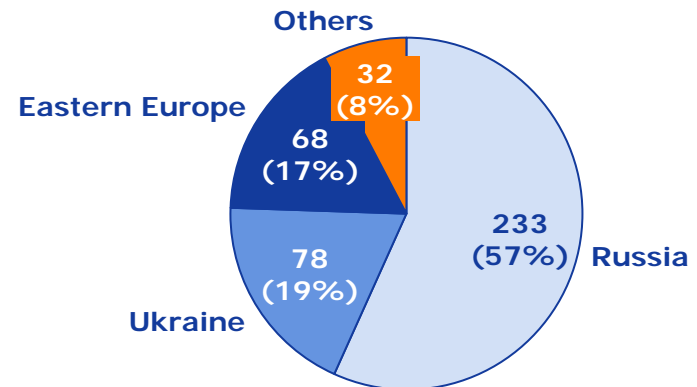
Technology push

Continued direct involvement of the private sector

# JI status and regulation

- **Registration process:** 15 projects approved as a result of the 1<sup>st</sup> tender. 2<sup>nd</sup> on going. A good signal for the market.
- **Price floor @ 10 €/ERU.** May prevent project owner from early securitization of selling price
- **Track 1 vs Track 2:** One of the approved projects submitted to the JI Supervisory Committee, transferring it from Track 1 to Track 2. A signal towards EU changing appetite?
- **GIS:** still uncertain. May create sustainable back up to AAU utilization.

ERUs Potential Volume up to 2012 (Mt)



# Russia and post-Kyoto: linking GHG targets with the country's energy strategy

## Russia's energy challenges

- 40% increase in energy efficiency
- Modernization of thermal generation fleet
- Reduction in associated petroleum gas
- Increased penetration of renewable

**HUGE CO2  
ABATEMENT  
POTENTIAL**

## UNFCCC negotiations

- Full banking of surplus AAUs from Kyoto 1<sup>st</sup> CP? But AAU credibility is a problem to sort out
- 2nd commitment period only with involvement of advanced developing countries
- JI might disappear post-2012! But several solutions are under discussion

## What could be done

- AAU surplus as back-up for JI/other offsets
- Cooperation with counterparts to ensure continuation of JI or its enhancement via new mechanisms
- Engage with EU on offset bilateral deals and qualitative restriction issues (Track issue)

Post-Kyoto deal is an opportunity to attract investments for the country's energy strategy

# Conclusions

- Russia has a huge carbon reduction potential and it is setting very **ambitious long-term targets** to increase energy efficiency and promote renewable energies, but funding for these programmes is a critical issue
- **Carbon finance** can play a significant role in attracting foreign investments in these sectors
- Need for investors to have a **safer regulatory context** and **certainty** also in the registration process



# Thank you

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