

# 12<sup>th</sup> UIC Sustainability Conference

UIC Expert Networks: Energy Efficiency & CO<sub>2</sub>

VENICE 2012

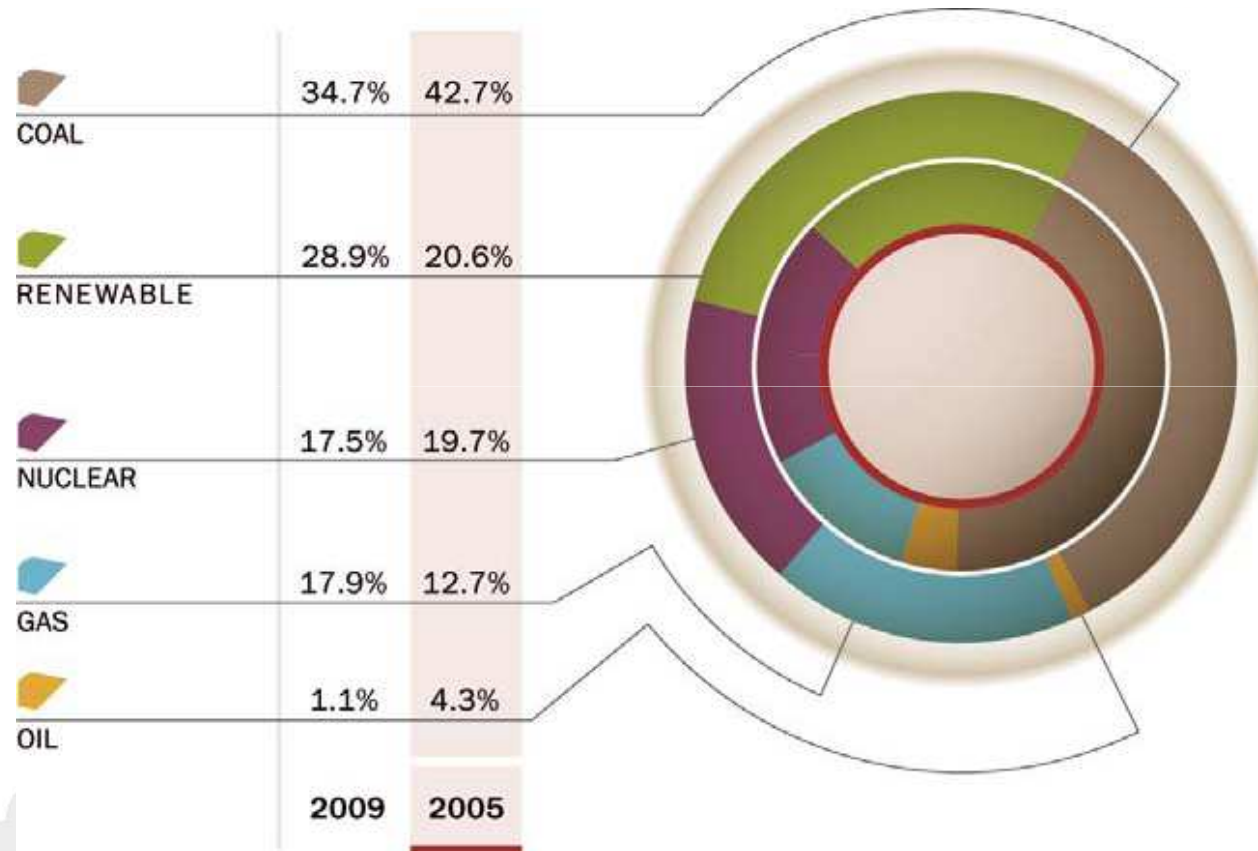


## Renewable Energy Use: Stakeholder acceptance of different qualities

Ulrich Ostermayer



# European Railways electricity mix 2005 inside - 2009 outside



European railways use almost 30% of renewable electricity, with a tremendous increase in the last 5 years

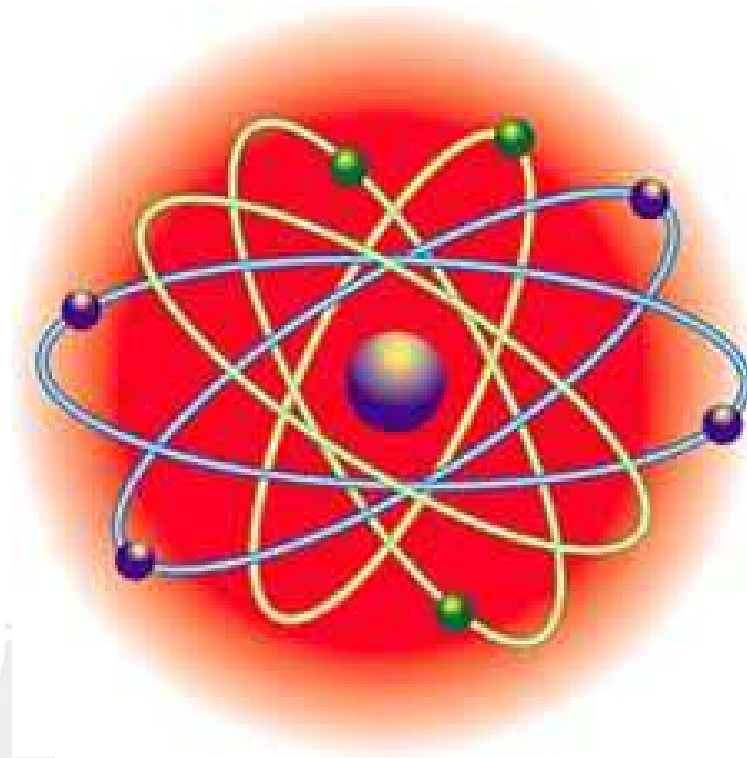
# Our success is our challenge



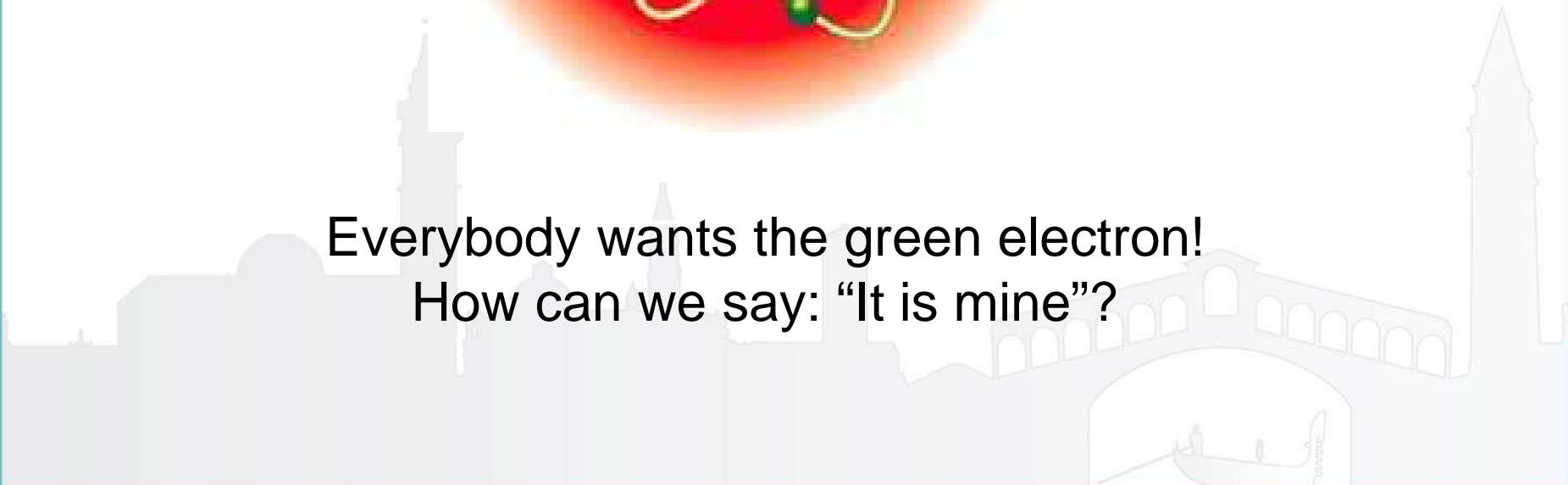
- ✓ Growing demand of “green energy use” from customers, both in passengers and in freight markets.
- ✓ Railways can directly benefit from the use of green energy, through direct electricity procurement, without additional costs for infrastructure adaptation.
- ✓ At the same time railways need to keep the environmental credibility, and avoid green washing.



NGOs are debating about the acceptability of different qualities of green electricity procurement



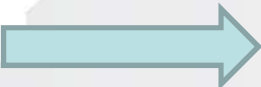
Everybody wants the green electron!  
How can we say: "It is mine"?



# A greening strategy must be credible



- ✓ The possible threats to credibility come by buying Renewable Energy Certificates (REC) or Guarantees of Origin (GO), or by investing in Carbon offset.
- ✓ These are all very good investments, but can we include the benefits of CO<sub>2</sub> reduction in the UIC/CER target or in EcoPassenger performance, claiming “zero emissions” ?
- ✓ RECs and GO can be “traded separately from the electricity they refer to”. How can we avoid “double accounting”?



In 2012 IFEU doesn't want to certify EcoPassenger and UIC database because of the use of RECs by some UIC members

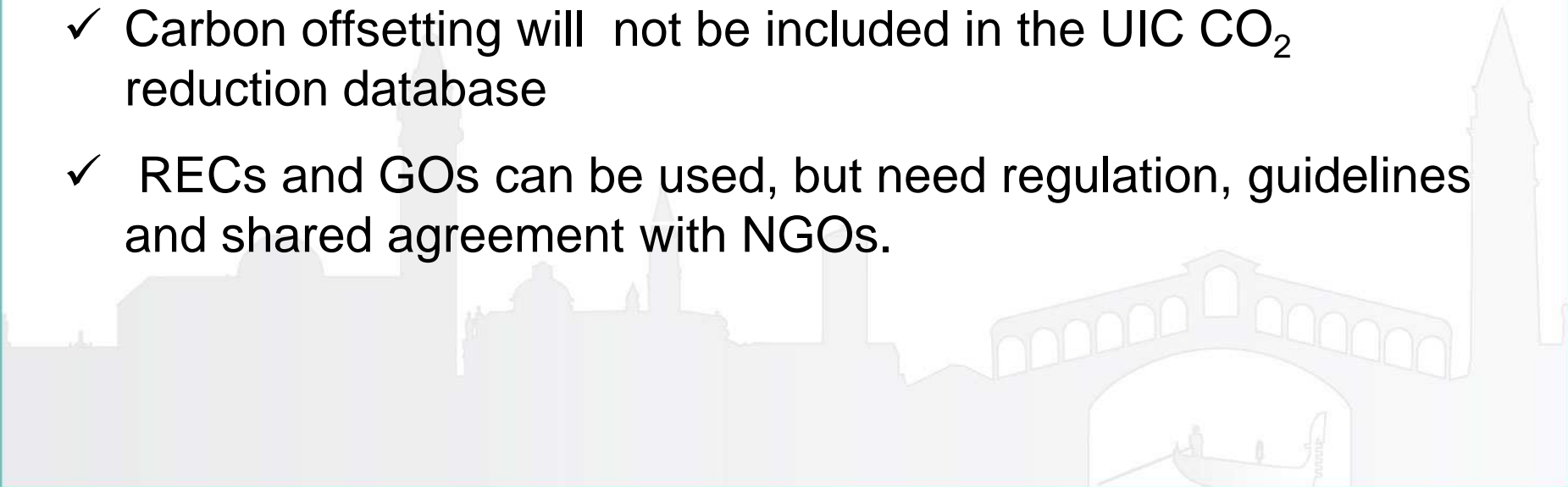
## UIC activities so far

UIC has realized the “Green certificates project”:  
Questionnaire to all European members in 2010  
+ Workshop in Paris in early 2011.



### **First conclusions:**

- ✓ Green Electricity procurement by contract is preferable.
- ✓ Carbon offsetting will not be included in the UIC CO<sub>2</sub> reduction database
- ✓ RECs and GOs can be used, but need regulation, guidelines and shared agreement with NGOs.



# Possible guidelines



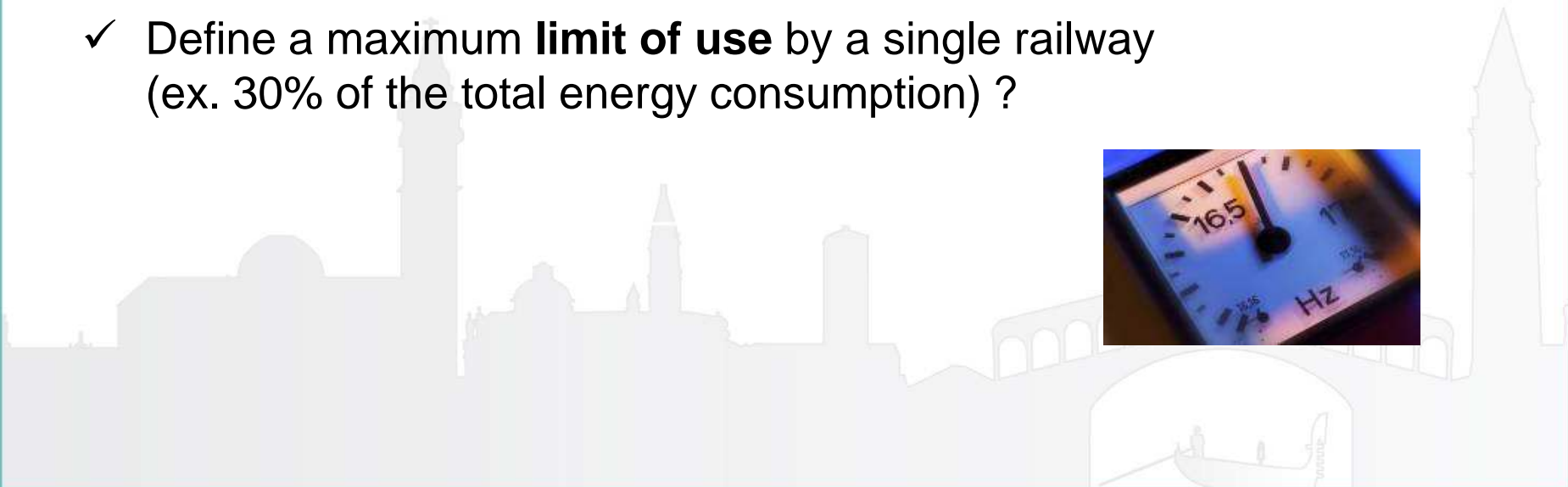
1. "Very strict approach": Only accept electricity procurement by a contract with the direct provider (physical supply).
2. "Reasonable approach": Accept different forms of procurement (including RECs and GOs), by defining clear guidelines, a **ranking of different qualities**, and share a strategy with European NGOs.



# How to rank certificates and make them acceptable?



- ✓ Define a threshold limit for the **age** of the electricity plant ?
- ✓ Define a required quantity of investment actually going to **additional** green electricity?
- ✓ Define a maximum **limit of use** by a single railway (ex. 30% of the total energy consumption) ?







# DISCUSSION



# The 2013 UIC “Zero carbon Railways” Project . Steps:



## Steps:

1. Internal consultation with UIC members only
2. Workshops with International NGOs/stakeholders for consensus agreement
3. Publication of a Common Rule (UIC/CER Guidelines)
4. Public presentation with NGOs
5. Certification of UIC Energy-Co2 data performance 1990-2011

