

SHAPING
AN EFFECTIVE
RENEWABLE
ELECTRICITY
MARKET

Disclosure as a Driver for Green Power

Jared W. Braslawsky

Deputy Secretary-General of RECS International

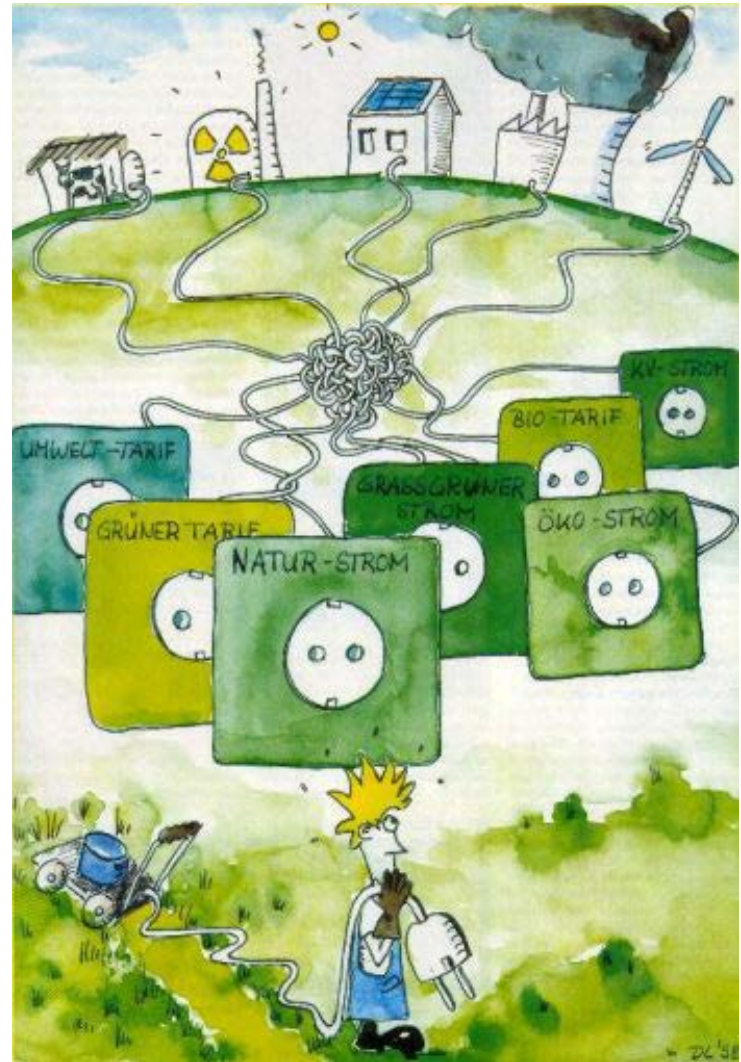
Date: Tuesday, September 25th, 2012

Crash course in the European electricity market...

- Every house in Europe is free to choose an electricity supplier (and an electricity product)
 - This means there is 'forced' competition
- Most countries require 'green' electricity products be tracked with the Guarantee of Origin (GO)
 - The GO is the European regulated electricity tracking mechanism
- European renewable energy targets are detached from tracking certificates
 - Meaning the mandatory national targets are based on national boundaries (e.g. Wind turbine built in the Netherlands counts ONLY for the Netherlands)
 - Green products from suppliers count only for the products (e.g. A tracking certificate from the Dutch [Netherlands] wind turbine can count in Norway for a Norwegian consumer's green product)

European tracking basics

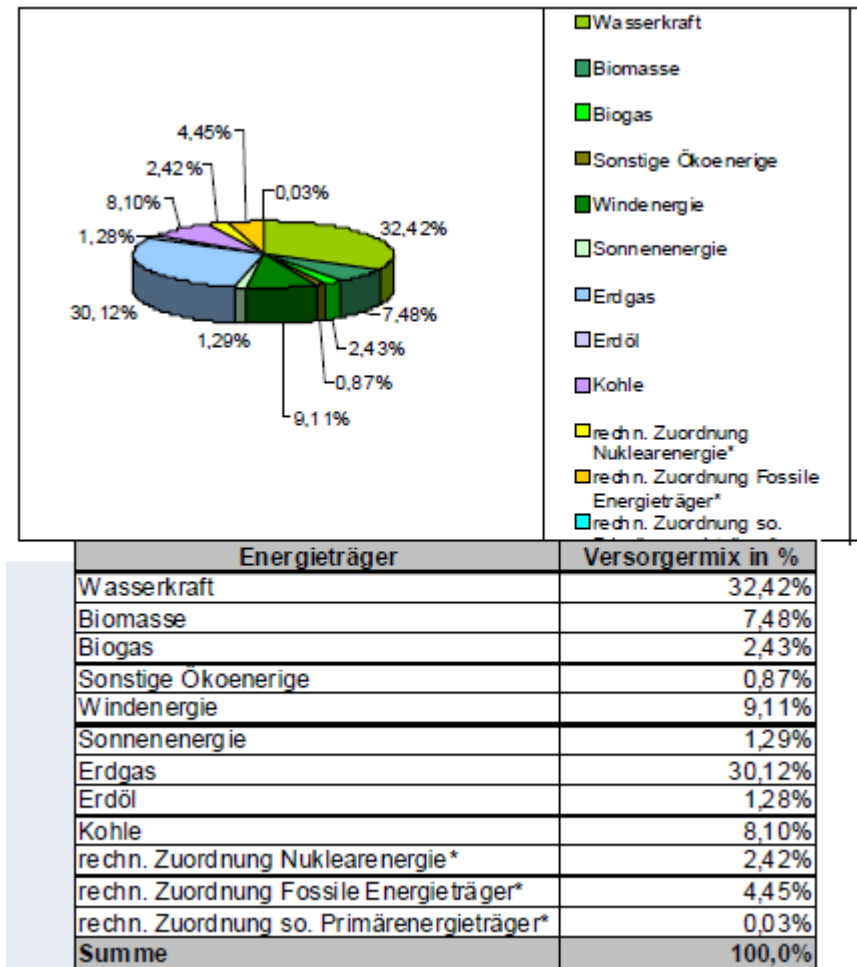
- Renewables Directive (2009/28/EC) Article 15
“For the purposes of proving to final customers the share or quantity of energy from renewable sources in an energy supplier’s energy mix..... at a guarantee of origin is issued in response to a request from a producer of electricity from renewable energy sources”.



Source: Unknown

European disclosure basics

- Electricity Directive (2009/72/EC) Article 15
 “Member States shall ensure that electricity suppliers specify in or with the bills and in promotional materials...the contribution of each energy source to the overall fuel mix...information on the CO2 emissions and the radioactive waste”.

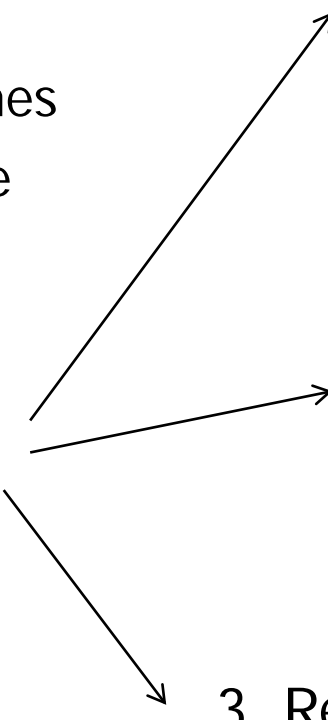


Source: Presentation from Angela Puchbauer-Schnabel with E-Control at RE-DISS Final Conference Sept. 12, 2012

Disclosure in reality

Due to a lack of regulation
Europe has vague, sometimes
irrational national disclosure
rules.

The three types of EU Disclosure:



```
graph LR; A[The three types of EU Disclosure:] --> B[1. National Grid-Mix Disclosure]; A --> C[2. Supplier-Mix Disclosure]; A --> D[3. Residual-Mix Disclosure];
```

1. National Grid-Mix Disclosure

- Falling out of trend
- Was the default from the 'pre-electricity tracking days'

2. Supplier-Mix Disclosure

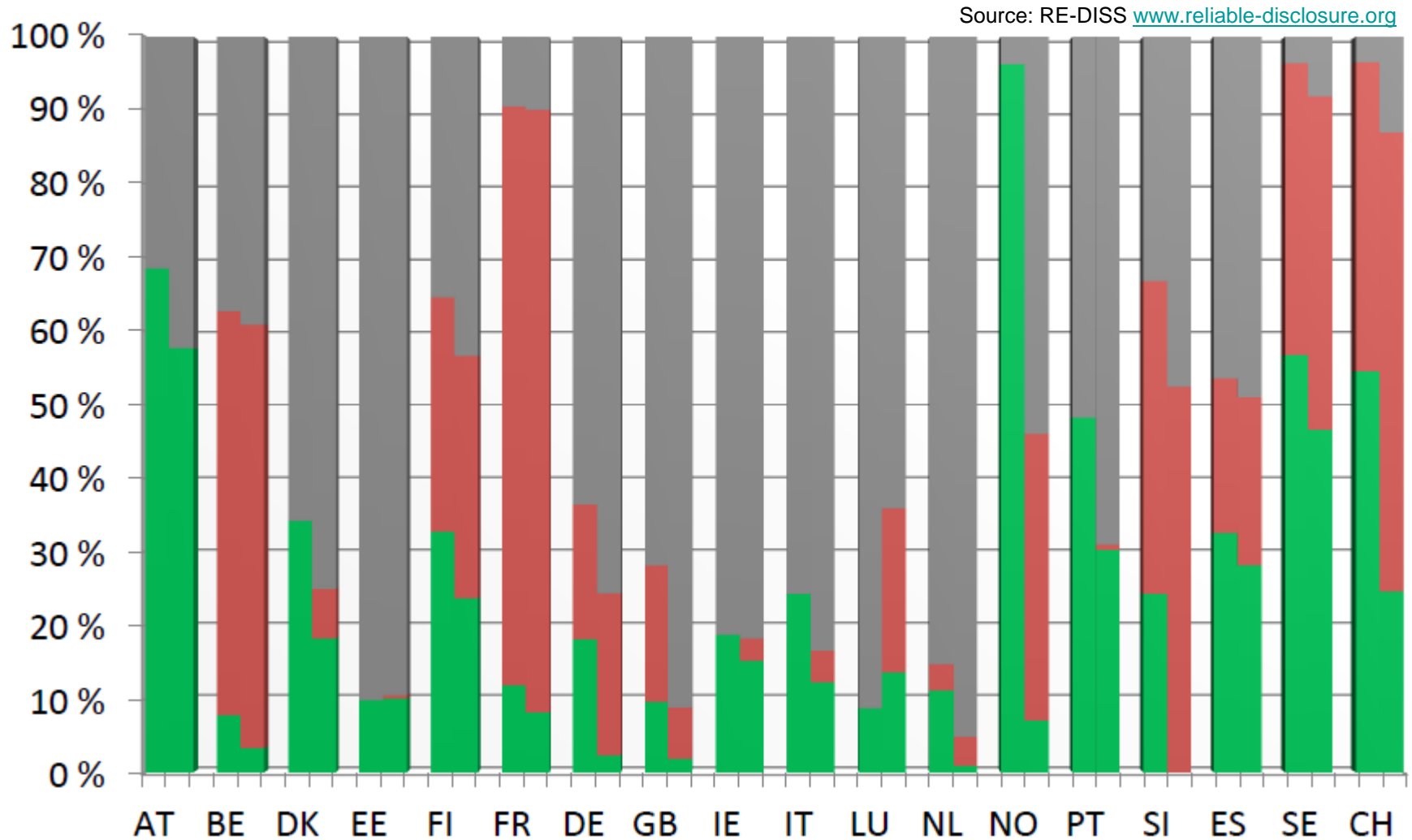
- Every Country
- The rules vary significantly from country to country

3. Residual-Mix Disclosure

- Adopted by many countries
- Needs yearly calculations

Production Mix (Left) vs Residual Mix (Right)

■ FOS
■ NUC
■ RES



How does this drive green power?

1. Businesses

Happening now

2. Consumers

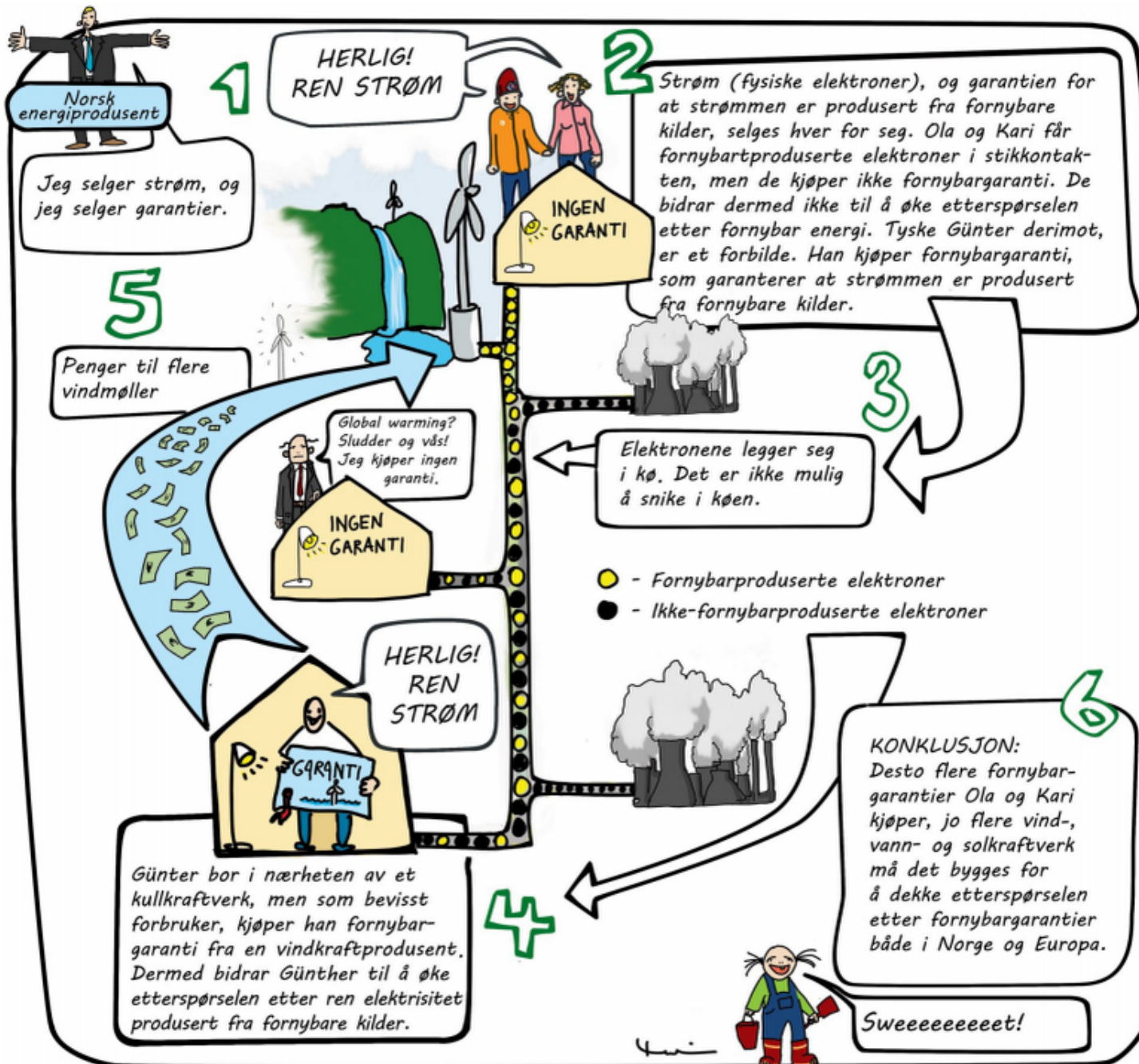
We see signs in this direction

3. Countries

**This has just started and will be known
post-2020**

Business driving green power

- Scope II carbon accounting
 - This helps explain the European push towards an industry-wide attritional accounting method
- LCA
 - In a world where 7% elec. is tracked (nearly 40% renewable) a worsening grid average gives more reason to implement business sustainability measures
- Not just disclosure but tracking
 - Some Swiss non-subsidized GOs have traded for 220 Euro/MWh Source: According to sources at the Swedish Energy Agency



ure 2011

%

- Renewable power
- Nuclear power
- Thermal power

Source: WWF Norway - http://www.wwf.no/bibliotek/nyheter_fakta/nyhetssaker/?34748/Kjper-du-fornybargaranti-Kanskje-du-ikke-vet-hva-det-er-WWF-tegner-og-forteller

Countries driving green power

Currently targets are based on national lines...

Where as disclosure rules are becoming more dynamic...

Is this the way to bring cost-efficiency to a post-2020 world?

Thank You For Your Attention!

Jared W. Braslawsky
RECS International vzw
Deputy Secretary-General

P.O. Box 1130
6801 BC Arnhem
The Netherlands

www.recs.org
secretariat@recs.org
j.braslawsky@recs.org

T: +31(0)26.356.94.25

