Common Swedish Norwegian certificate market for renewable electricity

Eva Centeno López, Ministry of Enterprise, Energy and Communications, Sweden

Workshop on Review Environmental State Aid Guidelines 12 April 2013
Background

- The certificate scheme for green electricity was introduced in Sweden May 2003.
- However, guaranted price for certificates during first 5 years → state aid → compatible with Art. 87.3 c EC Treaty (now Art. 107.3 TFEU) (necessary, low level, limited to short period...)
- Guaranteed price for certificate expired 2008 → no such element in the current system
- Common certificate market for green electricity with Norway from January 1st 2012
Why a certificate scheme?

• Delivery – not more not less than target
• Long term predictability for investors
  – Most decisions by the market not politicians.
  Investors handle investment risk.
  – Not financed over state budget
  – Pre-defined dates for progress reviews
• Low costs for consumers
  – Technology neutral -> cheapest first &
    competition drives costs down
  – Support level automatically adjusted to cost developments
• Expansion of market possible
Why a joint support scheme?

• Better market functioning
  – higher liquidity, better price formation
  – bigger market more attractive for investors

• Increased cost-efficiency
  – Access to larger production base

• Increased long term predictability for investors through politically stable system
Timeline

2003  SE elcert system starts
2004  First bilateral discussions
2006  Discussions paused
2009  Governments agree on principles

2011  National legislations passed through parliaments
       Governments/parliaments agree on Treaty
       NO implements RES Directive
2012  Common SE-NO market starts

2020  Target 26.4 TWh

2035  End of cooperation
The treaty on the common electric market

**TARGET & OBLIGATIONS**
- 26.4 TWh 2020
- 198 TWh 2035

**COMMON CERTIFICATE MARKET**
- Mutually interchangeable

**ENTITLEMENT OF CERTIFICATES**
- Tech. neutrality

**ADDITIONAL SUPPORT**
- No add. support

**PROGRESS REVIEW**
- Before end 2015

**ORGANISATION**
- Council/Committee

**3rd PARTIES**
- Coop-mex
How the common certificate market works

1. Issuing of certificates RES-E: 1 certificate/MWh
2. Producers sell certificates & electricity
3. Certificates traded bilaterally/brokers
4. Electricity suppliers buy certificates
5. Costs passed on to end users
6. New RES-E shared 50/50 between NO-SE
Market prices for RES-E since 2003
Performance of the Swedish certificate market during the period 2003-2011

• Renewable electricity production increase by 240%, corresponding to 13% of total Swedish electricity production in 2011
• Quota fulfilment nearly 100% (77% 1st year)
• End-use consumer average certificate cost amounts to approximately 3-5% of total electricity price
Main advantages with quota-based certificate scheme

• Cost-effective instrument to fulfil renewable electricity target
  – Competition drives production costs down

• Compatible with EU state aid rules
  – Non-discriminatory (i.e. not technology specific)

• Market-based instrument
  – Full exposure to market signals

• Off state budget financing
Key challenges

Going from national to bilateral RES-E policy is a political challenge

- The production target for the common market
- Burden sharing
- Location of new production is decided by the market
- Changes to the system becomes a bilateral question
- With market in place - many issues require regular contacts, in particular concerning information that can affect the market
Key lessons learned

• Without political will – no success

• What facilitated the agreement
  – Integrated electricity markets
  – Roughly same RES-E potential
  – Separate national certificate legislation still gives some flexibility
  – For SE: to keep existing design/target and no substantial change in certificate prices

• It’s possible!
Thank you for your attention!
eva.centeno-lopez@gov.se