

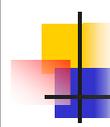


# Developing green markets

---

Atle Midttun

1



## Three schools in market design

---

- **The historical/sociological school:** markets are socially embedded and emerge through historical processes, they cannot be fundamentally constructed, only adjusted
- **The rationalist economic school:** markets can be constructed for most purposes as incentive systems that elicits desired market practices among the market actors
- **The transition management school:** markets and market design/policy co-evolve as learning processes. Policy learning runs parallel to learning in the market

2

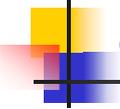
Regulatory Approach	Main focus	Characteristics	Example
I Market adjustment	Existing markets are adjusted to function better/ include new concerns	Administrative restriction added to the general exchange regime. The restriction is set outside of the market system	Environmental taxes
II De-regulation	Opening up for competitive exposure	New sectors opened up to general market rules	Opening up for competitive energy markets
III Market design for specialised transactions	Institutionalisation of specific elements beyond the standard market rule model	Adds specialised exchange regime,	Specialised functions in electricity trade: balancing power; grid access etc.
IV Market design with constitution of preferences	Institutionalisation of specific elements beyond the standard market rule model Actors and preferences are explicitly constituted by design	Transfers the design element to the fundamental motivation for exchange	Green certificates Climate/ emissions markets

3

## Transparency, liquidity and competition

- Complaints about limited transparency and strategic behaviour in the Swedish case
- Large part of the trade is handled bilaterally OTC, and the Nord pool market has not had sufficiency volume
- Strategic position of Swedish paper and pulp industry

4

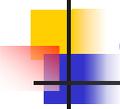


## Transparency, liquidity and competition II

---

- UK: competition suffers under lack of speculative trading:
  - ROCS cannot be cashed without having a quota obligation
  - Prices don't show enough volatility to attract traders
  - Lack of transparency in the market with information being in the hands of few incumbents

5



## Transparency, liquidity and competition III

---

- Liquidity in the Dutch market was good due to international trading. However as the tax incentive decreased liquidity dried up

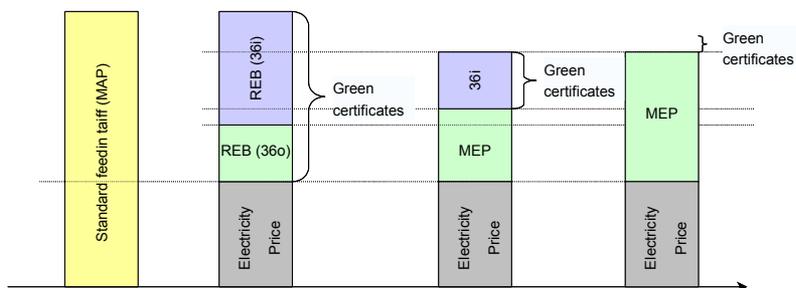
6

# Learning vs. stability

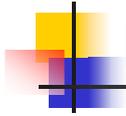
- The Dutch Paradox:
  - When learning an experimentation at both the policy/market design level and at the market player level is too intensive, innovation is undermined.
  - Lack of commitment and short-sighted reviews
  - Lack of transition periods
  - Financiers distrusted the subsidies

7

# The changing dutch regime



8



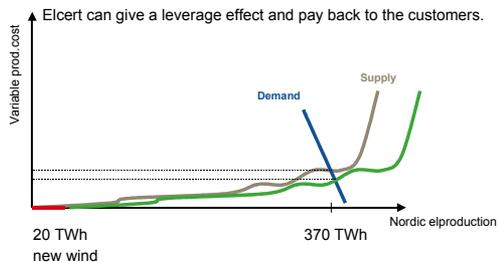
## Learning vs. stability

- Concerns with open ended policy positions and lack of long term committments in UK and Sweden
- However, critical for the Swedish system to be rightly calibrated

9



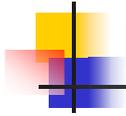
## Multi-market complexity



Dutch physical delivery  
Requirements increased  
Congestion on cables

New interfaces with Kyoto  
mechanisms

10

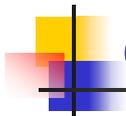


## Distributive issues

---

- The asymmetric construction of the Dutch certificate system led to strong concerns with distributive issues at the international level.  
The EU let the Netherlands down in international transferability
- There are disputes over ownership to the certificates
- Concerns with windfall profits to Swedish paper and pulp industry
- UK: debate over credit risk in the buyout fund triggered a mutualisation.

11

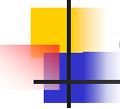


## Some comparative observations

---

- The UK – Swedish inconsistency:
  - UK allows limited banking of cert's (25% from one year to another) to minimise the possibility of strategic behaviour
  - Sweden allows unlimited banking for the whole certificate period for the same reason – to increase market efficiency

12

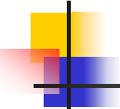


## Some comparative observations

---

- **The UK – Swedish inconsistency II:**  
Sweden has taken away the absolute price ceiling which became a strategic price target, and is now setting the fine at 150% of average market price over the year  
The UK has an absolute upper limit

13



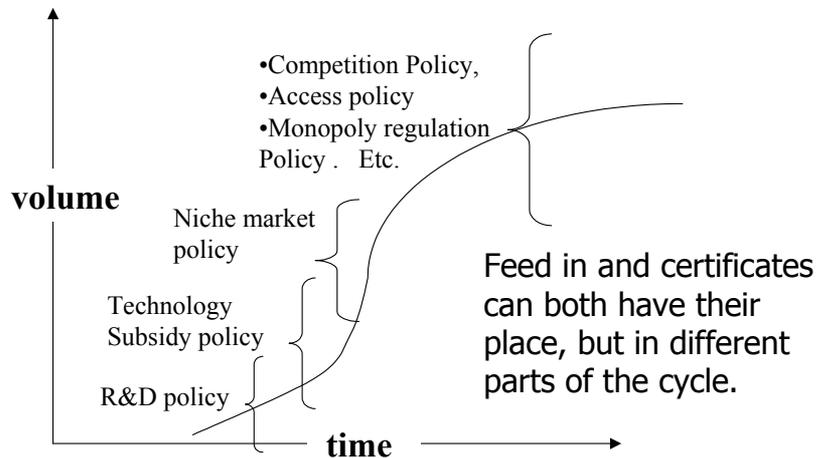
## So what?

---

- Can we still believe in the constructivist-rationalist school?
- Has not the transition model failed?
- Why don't we go for feed in instead (robust system)
- What reasons remain for certificate markets?

14

# Sequential application of regulatory instruments



15

# Europeanisation: The interactive effect



Figure 6 Dynamic aspects of regulation

16