

# Certificate trading – part of the solution or part of the problem?

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# Hypothesis

Quota/ tradable certificate trading schemes are likely to present similar problems in different areas of application.

This presentation discusses:

- Certificate-based schemes for supporting renewable electricity (RES-E)
- Emission trading of GHG as practiced (and now modified) under EU ETS

# Common features of certificate trading schemes (RES-E, GHG...)

Hypothesis: They originate with the same constellation of interest and ideology

- Large, incumbent corporations promote „regulatory capitalism“—“lobbying for regulation they know they will easily satisfy but that small competitors will not be able to manage“ (Braithwaite 2005, 25; 2008)
- They operate in the name of deregulation, „market-based rules“ and global/European governance
- They seek to restrict competition by co-designing governance rules to control entry
- They seek to secure high returns for lackluster performance and mediocre innovation by creating rents

# Similarity between the politics of quota/certificate schemes for renewable electricity and for GHGs?

- Their originators advanced similar claims concerning the advantages of the respective schemes
- These claims are in stark contrast with reported reality in the case of RES-E
- They are likely to contrast with reality also in the case of GHGs, although this is less easily verifiable (changing object and limited experience with alternative instruments)

# The case of renewable electricity (RES-E) support schemes - 1

- In mid-1990s Germany, the success of new RES-E generators due to feed-in tariffs greatly irritated the eight large incumbent electric utilities; *inter alia* they turned to Eurelectric and DG Competition for help and proposed a new scheme of quotas/tradable certificates
- The Commission came up with a policy aimed at stopping feed-in tariffs as illicit state aid and proposing to harmonise RES-E support via a quota/certificate scheme supported by Eurelectric (Lauber 2007)

# The case of certificate trading and renewable electricity support - 2

The Commission argued (in late 1990s and again in 2007) that a quota/tradable certificates scheme was superior since it was „market-based“ and thus more efficient and effective:

- It would drive down RES-E cost faster than REFITs („direct competition“, static efficiency)
- It would lead to greater deployment of RES-E installations („effectiveness“)
- It would more effectively stimulate innovation in RES-E technologies („dynamic innovation“)  
(Lauber and Toke 2005)

# The case of certificate trading and renewable electricity support - 3

These claims were first advanced in 1998. In the EU, quota/certificate systems were first introduced in 2002

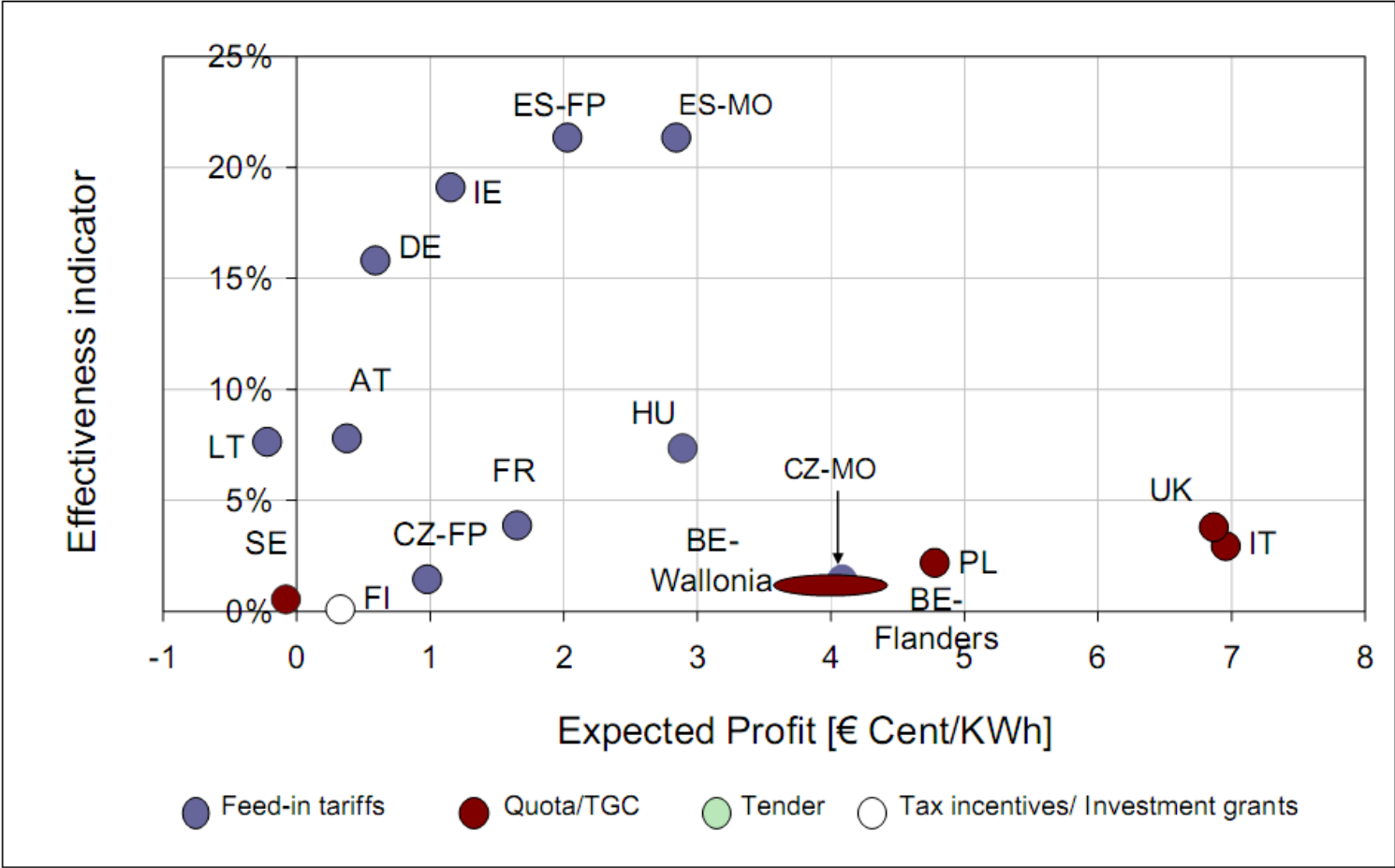
So far, these claims are contradicted by the facts.  
Feed-in tariffs seem superior

- in their ability to reduce costs
- in leading to greater deployment
- in driving technological innovation

See also the following figure from the report on RES-E support (European Commission 2008):

# The case of certificate trading and renewable electricity support - 4

Figure 1: Historically observed efficiency of support for onshore wind: Effectiveness indicator compared to the expected profit for the year 2006



Source: OPTRES, 2007

# The case of certificate trading and renewable electricity support -5

This graph shows that quote/tradable certificate schemes lead to greater profitability via higher prices but to lower deployment

Only feed-in tariffs (in Germany and Spain, (earlier on in Denmark) led to the build-up of an innovative renewable power equipment industry, e.g. wind turbines (dynamic efficiency)

# The case of certificate trading and renewable electricity support - 6

Why are quota/ certificate systems inferior?

- Greater investor insecurity under such schemes lead to demands for a higher internal rate of return (IRR) (usually going to incumbents who can better take the risk– „monopoly rent“)
- The single price for different situations and technologies leads to windfall profits for incumbents (Jacobsson 2008; Verbruggen 2007)
- High IRR and windfall profits divert resources from innovators to incumbents while the extra risk leads to emphasis on cheapest, short-term solutions; this discourages innovations with longer time horizons

# Can RES-E experience with certif. trading also be applied to EU ETS?

1. Large, incumbent corporations promoting „regulatory capitalism“–“lobbying for regulation they know they will easily satisfy but that small competitors will not be able to manage“ (Braithwaite 2005, 25; 2008)
2. Operating in the name of deregulation, „market-based rules“ and globalisation
3. Aiming at restriction of competition by co-designing governance rules to control entry
4. Aiming at securing high returns for lackluster performance and mediocre innovation

# 1. Lobbying for regulation they know they will easily satisfy but that small competitors will not be able to manage

This includes in particular

- Lobbying for regulation whose implementation is to be handled with a minimum of democratic control (slide 13)
- Regulation that restricts new entrants and small competitors generally (slide 14)
- Regulation that rewards average performance with high returns (slide 15)

## 2. Invoking deregulation, „market-based rules“ and globalisation

- Deregulation is a standard claim despite strong regulation, though not originating only with states („governance“)
- Globalisation seems to call for global price to create level playing field for emitters. This disregards distributional issues with Third World, undermines acceptance there
- Implementation of „market“ regulation largely excludes democratic authorities, leading to problems of countering incumbents‘ power, of acceptance in the long run also in First World?

### 3. Competition rules designed to control entry

- The compounded uncertainty which results from the „artificial“ risk of ETS certificate volatility and the political risk of trading regime changes is harder to sustain by smaller firms
- Grandfathering creates windfall profits only for incumbents: €6-8 bn/year for German utilities, 800m Lbs for UK's in first phase (2005-2007). These will continue – reduced by 10% due to auctioning - during second phase (2008-2012)
- Auctioning favours large corporations with ready cash e.g. from windfall profits in 1st + 2nd phase)
- Complex administration (certifications, trading...) easier to sustain for large corporations

## 4. Securing high returns for lackluster results

- Windfall and monopoly profits in phases 1 and 2, legitimated as „bait“ to secure support from large incumbents, lead to minimal GHG reductions and divert resources from innovators to incumbents
- Emphasis on cheapest carbon savings and insecurity of future certificate prices (price volatility, political risk, competition from CDM) inhibit far-reaching innovations, lead to emphasis on cheapest, short-term solutions (such as the replacement of old coal power plants by new ones or of dirty coal by clean coal). Serves incumbents, not innovators
- Intelligent „command and control“ or taxation did better (Driesen 2003, Fischer 2005, Baldwin 2008).

# Certificate trading cements the power of incumbents and delays effective climate policy

- The introduction of certificate trading – often presented as a „neutral“, „market-based“ instrument - enhances the political and economic position of incumbents and weakens that of new entrants
- It diverts resources from innovators to incumbents who focus on limited innovations, this inhibits radical innovations and far-reaching solutions
- It would seem wise to rely to the extent possible on other actors in the formulation of instruments for renewable energy and climate change policies

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