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# Environmental State Aid Guidelines

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# CONTEXT

- market failures in environmental domain – mainly externalities, (public goods), but also imperfect information, coordination problem, market power
- various forms of intervention to correct for them – regulation, market-based instruments (polluter-pays), information disclosure, voluntary commitments etc.
- OBJECTIVE: (...) to ensure that environmental state aid measures result in a higher level of environmental protection than would occur without the aid and [...] positive effects of the aid outweigh its negative effects in terms of distortions of competition (EAG para 6)
- but more and more it's about energy/low carbon economy and (carbon) leakage risks

# STATE AID QUALIFICATION

## transfer of state resources

- imputability to the state – established by law and licensed by state (cf. Green Electricity Settlement Centre in AT, N 446/2008, ECJ in Essent Netwerk C-206/06)
- from state resources - strict interpretation, cf. PreussenElektra case (C-379/98) → some feed-in tariffs schemes notified (AT, ES, RO) some not (DE, CZ)
- state aid in ETS NAPs (5% or 100% of grandfathered EUAs?)

## advantage

- „market investor“ principle
  - but what about Porter hypothesis, CSR, green activities?
- some difficulty with counter-factual (what is alternative investment in a particular case)

# STATE AID QUALIFICATION

## selectivity

- objective justification of a difference – narrow interpretation (cf. Spain v Com C-409/00, Austria-Wien)
- eg. in eco-tax design only environmental criteria may be taken into account (cf. British Aggregates C-487/06)
- Dutch NOx ETS based on installed thermal capacity (>20 MWh) found selective by ECJ (C 279/08 P)
  - does it imply that avoiding fine (by complying to ceiling) through purchase of allowances means foregone state revenues?
- Austrian Green Electricity Act aid to large energy consumers based on 0.5% green electricity spending threshold found selective, cf. C 24/2009 and GC (pending) case T-251/11
- what about undertakings inside and outside EU ETS - are they in a comparable situation ?

# 2008 ENVIRONMENTAL STATE AID GUIDELINES

- one of the prominent horizontal state aid objectives (representing approx.  $\frac{1}{4}$  of total aid to industry and services)
- strong link to Climate and Energy (20/20/20) package
  - some key envi/energy legislation adopted afterwards – RES, CCS, IED, EPB Directives
- bi-dimensional approach
  - incentivise pollution reduction (ie internalization)
  - incentives to achieve higher level of envi protection (beyond current legislation)
- fundamentally distinguishes between investment and operational aid – operational less frequently compatible

## 2008 EAG (CONT'D)

- maximum aid intensities (often higher for SMEs) for aids – increase from 2001 EAG (100% with bidding procedure)
- generally based on extra costs needed to achieve higher envi protection
- environmental state aids in 2008 General block exemption Regulation – investment aid enabling to go beyond Community standards, early adoption, acquisition of transport vehicles which go beyond Community standards, investment aid for energy saving, high-efficient CHP and RES promotion, environmental studies, reduction in envi taxes

# ENVI STATE AID STATISTICS

- envi protection aids approx. 24% of aid to industry and service
- 2004-2010: 347 final decisions (320 compatible, 21 no aid, 6 negative)
- 82 % schemes, 6% individual applications, 11% ad hoc cases

## 2010 statistics

	<b>Total aid for envi protection (in bln EUR)</b>	<b>Tax exemptions / reductions (in bln EUR)</b>	<b>Main aid measure</b>
<b>Germany</b>	<b>5.5</b>	<b>5</b>	<b>Spitzenausgleich</b>
<b>Sweden</b>	<b>2.3</b>	<b>1.8</b>	<b>Energy tax on electricity reduction</b>
<b>UK</b>	<b>1.4</b>	<b>0.4</b>	<b>Renewable Obligation, CCL</b>
<b>Netherlands</b>	<b>1.05</b>	<b>0.1</b>	<b>CHP energy saving scheme</b>
<b>Austria</b>	<b>1.02</b>		<b>Green electricity scheme</b>

*Source: State Aid Scoreboard, Spring 2011*

# ENVI STATE AID STATISTICS

- direct grants dominate in number, followed by tax reductions / exemptions, only few others (guarantees, soft loans, debt write offs etc.)
- GBER (envi cases): EUR 0.7 bln in 2010 (5% of total envi aid)

## Time from notification to decision (in days)

CASE TYPE	Count	Avg	Min	Max	St.Dev.
Ad Hoc Case	11	279	44	644	158
Individual Application	20	281	33	874	204
Scheme	138	279	28	2623	326

*Data: State Aid Register*

## 2008 EAG (CONT'D)

- **balancing test** - detailed assessment (proportionality analysis)
- existence of market failure (i.e. objective of common interest )
- appropriateness of instrument (i.e. least discriminatory) – doctrine of „eligible costs“ (i.e. minus economic benefits)
- necessity (i.e. insufficient market incentives)
- proportionality (distortion of competition, effect on trade)
- overall positive balance – what is the reference (social optimum?)
- initially some critique – too narrow (i.e. no full CBA), too complicated, lacking legal certainty, lacking legal basis (what „may be considered“ means?), time-consuming („unending requirements“)
- but also welcomed as generally-applicable analytical framework

## 2008 EAG (CONT'D)

- operating aid for renewable energy sources - either based on difference between production costs and market price or using market instruments (green certificates, tenders etc.) but not in combination (cf Italian Biodiesel Tax, N 326/2007)
  - also allows for calculation of operating aid based on external costs avoided - not frequently used in praxis (despite corresponding to polluter-pays principle)
- new rules for tradable permit schemes, efficient district heating etc.
- reformulated aid for waste management (eg Irish Waste Mng scheme from 2001 EAG time reclassified to regional aid)

# EXTRA COSTS VS. EXTERNAL COST AVOIDED

## external costs of and promotion of renewable electricity

CZ (2008)	external costs	green premium*
	c€/kWh	c€/kWh
small hydropower (<10MW)	0.09	5
wind (on-shore)	0.15	7
biomass (straw) CHP	3.64	8
biomass (woodchips) CHP	1.02	4
MCFC (biogas)	5.03	10
hard coal	4.90	
lignite	5.13 - 8.74	
natural gas	1.1	

\* premium paid above the market price of electricity (i.e. 6.72 c€/kWh as of 2008)

- green premium should reflect extra costs of RES
- price of GHG emissions matter – here valued at 19 €/tCO<sub>2</sub>

## 2008 EAG (CONT'D)

- aids in the form of reduction or exemption from environmental taxes
  - now (in amount of aid) the single most important aid category (cf. selectivity issues)
  - assessed for necessity and proportionality, i.e. related to the environmental performance (min. 20% of national tax or Community min. tax level)
  - tightening of derogation options from eco-taxes, but scope for CBA to account for environmental costs alleviated by aid to environmentally beneficial behaviour

# 2008 EAG (CONT'D)

## Aids involved in tradable permits

- criticized as weakest part of 2008 EAG (blurring distinction between Art. 107(1) and 107(3), unclear interpretation of „undue“ barriers to entry for new entrants)
- relative lack of experiences („double burdening“ with eco-taxes)
- no account of risk of carbon leakage for EU ETS costs passed on in electricity prices
- addressed in **2012 ETS Guidelines** - four new State aid measures: aid to compensate increases in electricity prices resulting from the inclusion of the costs of GHG emissions due to EU ETS; investment aid to highly efficient power plants; optional transitional free allocation in the electricity sector in some MS; and the exclusion of certain small installations from the EU ETS
- what would Australia EU ETS „joining“ bring to state aid control?

# AIDS FOR CARBON CAPTURE AND STORAGE

- EAG: „too early to lay down guidelines“ - Art. 107(3)(b) or (c)
- some demonstration projects, e.g. Rotterdam, Nuon, Mongstad (NO under EFTA SurvAuth)
- CCS Directive (2009/31/EC) – allows operators of CCS equipped power plants to subtract safely stored CO<sub>2</sub> from their duties under the ETS
- huge investment and operating costs of saving and storing CO<sub>2</sub> in full-scale CCS facilities - approx. € 200 per tonne CO<sub>2</sub> avoided estimated for Mongstad project
- know how sharing requirement - is it in fact environmental or R&D&I project?
- if environmental - should cost-effectiveness/cost-benefit also matter?

# FINAL REMARKS

- moving from pollution to climate/low carbon – what about nuclear?
- very complex / technical/time-consuming (also too open compared to rest of the world), and substantially shaped by ECJ
- no full assessment of costs and benefits (and external costs avoided) even in detailed assessment
- large uncertainties coupled to benefits of some state aids (i.e. cost of carbon)
- interpretation issues „by state of from state resources“ and selectivity - „parallel“ market based support systems (RES feed-in tariffs and tradable guarantees of origin) not constituting state aid but definitely distorting competition

**THANK YOU FOR YOUR ATTENTION**

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