

Policy Department
Economic and Scientific Policy

**Workshop
on the Renewable Energy Directive Proposal**

Briefing papers

These briefing notes were requested by the European Parliament's committee on Industry, research and energy, in the context of the workshop "Opportunities for renewable energy development in Europe" held on 24th April in the European Parliament.

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Workshop Programme: Renewable Energy Directive Proposal

Venue

European Parliament - Strasbourg - Room LOW N 3.3
9.00 – 12.00

9:00 Welcome and opening – Rapporteur MEP Mr Claude TURMES

Part 1: Biofuels sustainability criteria

9:10 Presentation by **Bart Dehue**
Bio energy consultant
Ecofys Netherlands

9:25 Debate: questions and answers session

Part 2: Legal aspects of the RES Directive (articles 8 and 9)

9:50 Presentation by **Angus Johnston**
University Lecturer in Law, Director of Studies at Trinity Hall
Faculty of Law in the University of Cambridge

10:05 Debate: questions and answers session

Part 3: Flexibility mechanisms between Member States

10:30 Presentation by **Mario Ragwitz**
Department of Energy Technology and Energy Policy,
Fraunhofer Institute Systems and Innovation Research, Karlsruhe

10:45 Debate: questions and answers session

Part 4: Reduction of red tape and streamlining of authorisation in the field of RES investments

11:10 Presentation by **Kai Wegrich**
Professor of Public Management
Hertie School of Governance

11:25 Debate: questions and answers session

Conclusions

11: 50 Closing remarks – Rapporteur MEP Mr Claude Turmes and Shadow Rapporteurs

"Biofuels sustainability criteria"

by Bart de Hue

EXECUTIVE SUMMARY

This report summarises the presentation, questions and discussion on sustainability criteria for biomass in the “Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources”, published on January 23 – 2008, that was held at workshop for Members of European Parliament in Strasbourg on April 24 – 2008.

1. IS BIOFUELS SUSTAINABILITY AN ISSUE?


Biofuel sustainability

ECOFYS

Is biofuel sustainability an issue?

Land needed for 10% *biodiesel* EU-27

• Rapeseed:	4	*
• Soya:	10	*
• Palm oil:	1 ^{1/3}	*



-> GHG emissions from LUC
-> Biodiversity
-> Land rights

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The slide features a dark blue background with yellow text. It includes a map of the Netherlands, a photograph of a dirt road cutting through a green field, and a photograph of a yellow rapeseed field under a blue sky.

One of the main risks of large scale biofuel production is land use change (LUC). If biofuels are produced from energy crops an area several times that of the Netherlands would be needed to meet the 10% biofuel production target for the EU-27. Note that:

- The numbers show the land requirements for 10% biodiesel production only (replacing 10% of fossil diesel consumption in 2020). They do not include land requirements for ethanol production.
- The numbers do not take into account residues. A recent study undertaken in the UK shows that taking into account the co-production of useful co-products can drastically reduce the net land requirements for biofuels (Ecofys 2008).

LUC can have several detrimental environmental and social impacts. Most notably, GHG emissions resulting from the LUC, damage to High Conservation Value (HCV) areas and conflicts over land rights – especially in areas where land rights are poorly documented, or defined. In short, large scale biofuel production faces several serious sustainability challenges.

2. DO WE HAVE ENOUGH POTENTIAL FOR SUSTAINABLE BIOMASS?

Biofuel sustainability ECOFYS

Do we have enough potential for sustainable biomass?

- Production on idle land
 - Palm oil: >10 Mha Imperata grasslands
- Yield increases / new crops
- Residues (2nd generation)
 - Palm kernel shell
 - Saw dust
 - Etc.

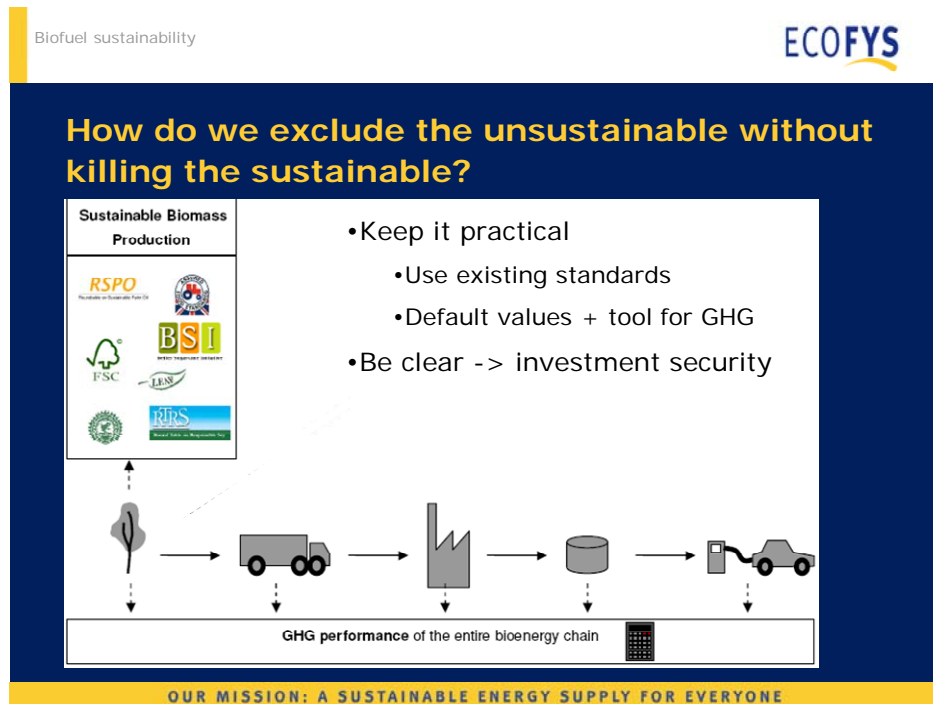


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While the sustainability risks of large scale biofuel production are very real, so are the potentials for sustainable biofuel production.

- i. Cultivation of energy crops on idle land leads to a controllable LUC, which in some situations can actually act as a carbon sink by increasing the carbon stocks above and or below ground. A practical example of this is the large area of previously deforested land in South East Asia, which is often overrun with Imperata grasslands (alang alang). Conversion of such lands can increase carbon stocks and does not need to damage important HCV land. Clearly, not all such lands can be used sustainably and a proper environmental and social impact assessment will always be needed. However, the potential is very real and large. For example, more than 10 million hectares of Imperata grassland exist in South East Asia alone – enough to meet the entire 10% EU biofuel production target.
- ii. Crop yield increases form another sustainable potential for biofuel production: increasing crop yields leads to increased production without using more land. The figure in the right hand corner of the above slide demonstrates the potential for yield increases, charting the increase in yields over the past 40 years. While cereal yields in the EU (top line) have increased from x to 5-6 tonnes per ha in this time, yields in Africa have hardly increased over the same period and are a factor of 3 times lower than in the EU. Clearly, increasing yields also brings its own sustainability risks such as increased agrochemical inputs and these risks must be managed properly.
- iii. Finally, residual products such as sawdust, coffee husks, empty fruit bunches etc, form a large supply of biomass that does not directly increase the demand for land. Currently biofuel conversion technologies can only use a limited number of residues such as used cooking oil and tallow, but with advanced conversion technologies a much wider range of residues becomes available for biofuels. Specific risks that must be managed here include soil quality (no overharvesting of agricultural or forestry residues) and competition with other uses.

3. HOW DO WE EXCLUDE THE UNSUSTAINABLE WITHOUT KILLING THE SUSTAINABLE?



In summary, large potentials exist for sustainable biofuel production. Each will still have their own risks which will require explicit attention but the potentials remain large. The challenge for policy makers is to create a biofuel market in which only the sustainable potentials are realized. This must be done in a practical way such that the sustainable potentials are not lost because of overly burdensome regulations:

- Existing sustainability standards, such as the Forest Stewardship Council (FSC) and the Roundtable on Sustainable Palm Oil (RSPO) can be used to demonstrate sustainable feedstock production. By making use of established standards, double certification costs are avoided. In addition, such standards have often been designed in close cooperation with local producers and therefore have a better acceptance among producers than a European imposed standard.
- Using default values for the GHG performance of biofuels avoids each party from having to determine the GHG performance from scratch (or perhaps first principles): which would be extremely time-consuming. Default values could be set at different levels (a very conservative default for parties who only know the fuel type, a less conservative value if the feedstock is known, and an even less conservative value if the feedstock country is also known). The UK RTFO has such an approach while the proposal for a directive only includes feedstock defaults.
- It is very important for investment security that the regulations are clear. Some of the criteria in the proposed directive are currently too vague and generate uncertainties for business – such as the lack of guidance on high biodiverse grasslands, or how to establish whether an area can reach the forest thresholds *in situ*.

4. WHAT IS COVERED/NOT COVERED IN THE RENEWABLES ENERGY DIRECTIVE

What is covered in the RED?

- What it covers
 - GHG emissions including direct LUC
 - Biodiversity (direct LUC)
 - GAP in EU (e.g. soil)
- What it does not cover
 - **Indirect LUC**
 - GHG emissions
 - Biodiversity
 - Soil/Air/Water pollution outside EU
 - Social issues
 - Land rights
 - Labor conditions

The EC proposal for a Renewable Energy Directive (RED) covers GHG emissions including direct LUC. It also categorically excludes certain land types with high carbon stocks from conversion to energy crop plantations after January 2008. It also forbids conversion of certain land use types with high biodiversity value after January 2008. Good agricultural practices are only required for feedstock from the EU in the form of Cross Compliance. The actual implementation of Cross Compliance differs strongly between and even within member states.

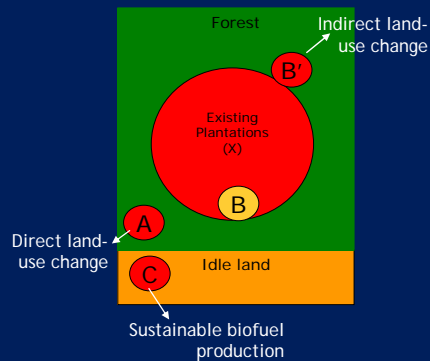
Important omissions in the proposal for a RED are mentioned in the slide above. Except indirect LUC, all the mentioned issues are covered in the sustainability requirements of the UK RTFO.

4.1 Indirect Land Use Change

Displacement effects can occur when the production of biomass displaces certain activities to other areas where they may cause negative LUCs, such as deforestation. An example of this is where demand for palm oil for the biofuel market is met from existing plantations which used to supply to the food market, can be seen in the slide above. Because palm oil is now supplied to the energy sector, the food sector is confronted with a shortage in supply. In the short run this will lead to higher prices as supply is slow to adapt to the new market circumstances. In time, the higher prices will attract new producers and supply will be increased. This additional supply will require additional plantations. Where these additional plantations will be located is uncertain, and more importantly, is out of control of the energy sector.

1. Indirect LUC

What is it?



How do we solve it?

- Residues = No LUC
- Yield increase = No LUC
- Idle land = controlled LUC

Indirect LUC = uncontrolled LUC

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Three forms of biofuel production exist which do not suffer from the risk of indirect LUC:

- Residues which do not directly put pressure on land use. However, residues may also be used by other industries and displacement effects may still occur although the actual effects of this will differ per case. When using agricultural residues, the soil quality has to be maintained – harvesting too much of the residues may negatively impact long term soil quality. New feedstock types which do not require (large) areas of land, such as algae, can also be produced without increasing pressure on LUC.
- Feedstock production from *additional* yield increases does not require additional land and therefore does not cause LUC. Note that this holds only for yield increases that are *additional* to the business as usual case. A mistake that is often made is to state that indirect LUC will not occur on a large scale as most increase in production has historically and will continue to come from yield increases. While indeed, yield increases have provided the majority of historical increases in production, yield increases alone have not been able to keep up with increases in demand. Also for the next decennia an increase in agricultural land is expected. The point is that additional production from ‘normal’ yield increases is already consumed by the growth in demand in traditional markets (e.g. food and feed) and an expansion of arable land is already needed to meet the growing demand of these traditional markets. Unless biofuel demand leads to *additional* yield increases, any *additional* demand from biofuels will therefore come from a further expansion of arable land.
- If biofuel feedstock is produced on idle land it does not displace an existing activity and therefore does not lead to displacement effects. Of course feedstock production on idle land does cause a LUC but the important difference is that this will be a direct and therefore a controllable LUC instead of an uncontrollable LUC.

4.2 Competition with food

2. Competition with food

- What you need to know first:
 - Biofuels currently still small (other factors more important) but growing fast
 - It does not matter if your biofuel tastes good
 - Higher food prices: Good or Bad? It depends...
 - Exporters win – Importers loose
 - Rural poor with excess production win – urban poor loose
 - Impact on food prices depends more on *speed* at which biofuel develop than on *eventual size* of biofuels -> how fast do we increase the target?
- How do we minimize the risk? Again,
 - Residues -> no competition for food/land
 - Higher yields -> no competition for food/land
 - Idle land -> no competition with existing food production

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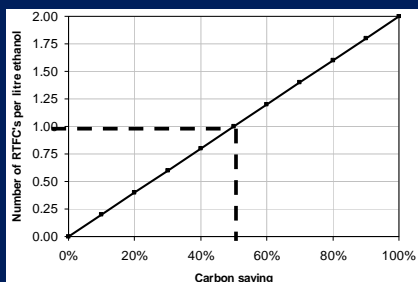
Recent increases in food prices are the result of multiple effects. Biofuels increase demand and therefore have an upward effect on the feedstock prices for commodities such as maize, wheat and vegetable oils, all of which are used in the production of biofuels. However, how large the effect of biofuels on food prices is, remains uncertain. A few important points which can be observed are:

- Currently, feedstock production for biofuels is still small compared to food, feed and material production. However, the demand for biofuel feedstock is growing rapidly.
- Using non-edible crops is not necessarily better in terms of food security than using edible crops. For example, if a *Jatropha* is grown on land previously used for food production, it still competes with food production. The competition is one for the production factors for food production, including productive soils and water.
- Higher food prices have a differential effect – net food exporters profit from higher prices while net food importers will see their terms of trade deteriorate. Higher food prices therefore have both winners and losers.
- Price changes are a result of the market dynamics in supply and demand. If demand increases very rapidly it will be more difficult for markets to adapt – the result of which is a temporary rise in prices. While the World may be able to produce a significant amount of biomass for bioenergy, as well as for food, feed and materials, the speed and level at which biofuel targets are adopted will be an important factor in determining the potential impact on food prices. In this respect it is important to note that the biodiesel market is relatively large compared to the traditional vegetable oil market. However, the grain market (ethanol feedstock) is significantly larger than the bioethanol market.

4.3 Greenhouse gasses emissions

3. GHG emissions

- RED does not stimulate higher GHG savings
- It does stimulates *types of biofuels*: ligno + residues
 - Count twice
 - But no incentive to improve GHG
- Alternative: weigh biofuels in target based on their GHG



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The current proposal for RED includes a minimum target for GHG emission savings but does not have an incentive to improve GHG emission savings beyond this minimum. This is a missed opportunity.

An alternative is to reward biofuels based on their GHG emission savings. In effect, this translates the volume target into a GHG emission reduction target. This would provide a clear incentive to increase GHG emission savings for all biofuels, including both first and second generation. The example shown in the slide is taken from an informal discussion paper on the UK RTFO.

4.4 Criteria on soil / water /air

4. Include criteria on soil/water/air

- Soil and water crucial for long term sustainability
- Includes responsible use of agro-chemical
- Covered in most existing certification schemes
- Included in UK
- Included in NL and DE draft

As mentioned previously, local environmental issues (air, water and soil) are not included in the proposal by the European Commission (EC) for feedstock outside of the EU. This is in contrast to the scheme operating in the UK. In addition, the proposals for sustainability criteria in Germany and the Netherlands include criteria for these local environmental issues.

Because these local environmental issues are typically well covered by existing certification schemes, producers could demonstrate compliance with these (and other) sustainability criteria through certification by one of these schemes.

4.5 Social criteria

Biofuel sustainability

ECOFYS

5. Social criteria

- Three alternatives by Ad-hoc working group:
 - Ratification of ILO conventions (verification at country level)
 - Sustainability criteria (verification at farm level)
 - Reporting by EC
- Effectiveness ILO conventions:
 - ILO 182 on Child labour: ratified by Brazil and Indonesia
 - ILO 29 on forced labour: ratified by Brazil and Indonesia
 - However, NGOs report forced and child labour in these countries
- Alternative: certification against existing standards
 - RSPO palm oil
 - SAN/RA working on general standard for biofuel crops
 - RTRS, BSI, FSC, etc.
- Reporting should be by companies for their feedstock, not only by EC for countries in general -> incentive for companies

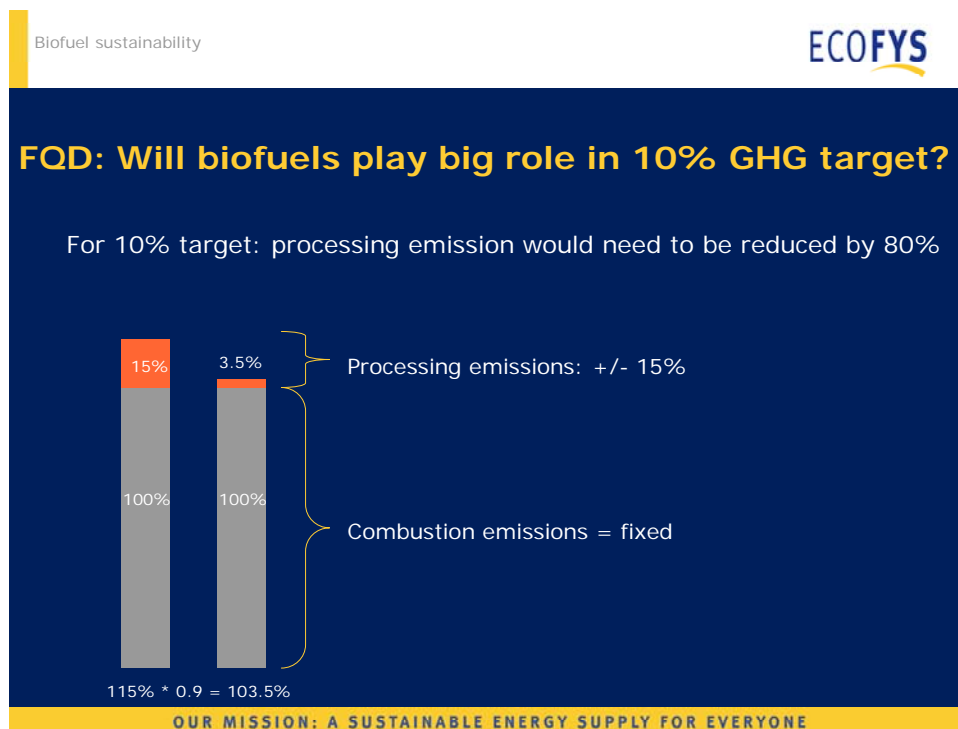
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As mentioned before, social issues are not included in the proposal by the EC. In a draft paper, the Ad-hoc working group on sustainability criteria (should these be capitalised?) produced three alternative proposals for the inclusion of social criteria.

- Feedstocks have to originate from countries that have ratified key ILO conventions. While these conventions are important in the eradication of bad labour conditions, they currently provide insufficient guarantees that the bad practices are indeed eradicated. This shows from reported bad labour conditions in countries that have ratified the relevant conventions.
- Third party certification provides significantly more guarantees that the criteria are actually complied with as such certification typically involves annual verification of the criteria by a specialised and independent body. By using existing certification schemes such as the RSPO, SA8000 and FSC, double certification efforts are prevented. This so called 'Meta-Standard' concept is currently operational in the UK and could well function at a European level as well. For more info see:

- UK carbon and sustainability reporting scheme: www.dft.gov.uk/rfa
- “Towards a harmonised sustainable biomass certification scheme”
http://www.panda.org/about_wwf/what_we_do/policy/index.cfm?uNewsID=109100
- The third option is a reporting option. While creating transparency in social issues around biofuel production is valuable, the incentive to improve performance is much stronger if reporting is done by individual companies on the feedstock that they source. This is currently practiced in the UK reporting scheme, see link above. Reporting by governments, or the EC, will provide significantly less incentives for individual companies to improve their performance.

5. FUEL QUALITY DIRECTIVE: WILL BIOFUELS PLAY A ROLE IN THE 10% TARGET?



With respect to the 10% biofuel target in the RED it is important to note that the proposal for a Fuel Quality Directive (FQD) also includes a target which is likely to lead to significant biofuel inclusion in the European fuel mix. The FQD includes a 10% GHG emission reduction target for the entire road transport fuel mix. As shown in the slide above, it is unlikely that such a reduction can be achieved by reducing upstream emissions in the fossil fuel chain alone. If upstream emissions in the fossil fuel chain amount to 15%, they would need to be reduced to 1.5% - an 80% reduction in upstream emissions. Biofuels are therefore likely to play an important role in achieving the FQD.

6. ADDITIONAL CONSIDERATIONS

Other needs

- Capacity building in developing countries
 - Certification may act as entry barrier
 - Especially for Small Holders
 - Yield improvements critical to future biomass potential

Biofuel production can form an important opportunity for sustainable development for many developing countries. However, complying with sustainability criteria and being able to demonstrate this compliance is not straight forward for resource scarce producers such as small farmers in developing countries. It is recommended that setting sustainability criteria is complemented by concrete programmes to assist resource scarce producers to comply with these criteria.

Finally, the ability to produce significant amounts of biomass for bioenergy next to food, feed and materials, depends on future developments in agricultural productivity. The potentials for increasing agricultural productivity is especially large in developing countries. It is therefore recommended that the EU initiates and participates in concrete programmes to work with producers in developing countries on the improvements of their agricultural productivity.

"Legal aspects of Articles 8 and 9, concerning the trade in Guarantees of Origin between Member States"

by Angus Johnston

EXECUTIVE SUMMARY

Under the proposed renewables directive, Member States would commit to delivering additional renewable energy so that collectively they would generate 20% of energy from renewable sources by 2020. The requirements for each Member State are linked to their GDP.

The proposed directive offers two options for inter-Member State cooperation, based upon the assumption that it may be advantageous to develop additional renewables in countries with good resource basis to meet the target in countries with higher GDP. Either Member States can transfer guarantees of origin for renewables between governments or they can implement a system for private international trade of guarantees of origin.

The paper discusses the legal implications for national support schemes and places these in the context of EC free movement law, analysing how the proposed directive would interact with the current legal position.

In conclusion, the paper strongly suggests that possible extensions and amendments should be made to enhance legal certainty for investors.

1. INTRODUCTION

The European Commission faced a tough challenge when drafting the proposed new renewables directive. How was it to deliver the 20% renewables target while: (i) ensuring efficient use of the resources available across Europe; and (ii) allocating the burden in a fair manner across Member States? In the draft proposal, the targets are to be allocated according to the economic strength of each of the Member States: every Member State has to contribute an additional 5.5% of renewables to its energy mix, and the remaining gap to the overall 20% target is then shared proportionately to the GDP of the Member States with minor additional adjustments.

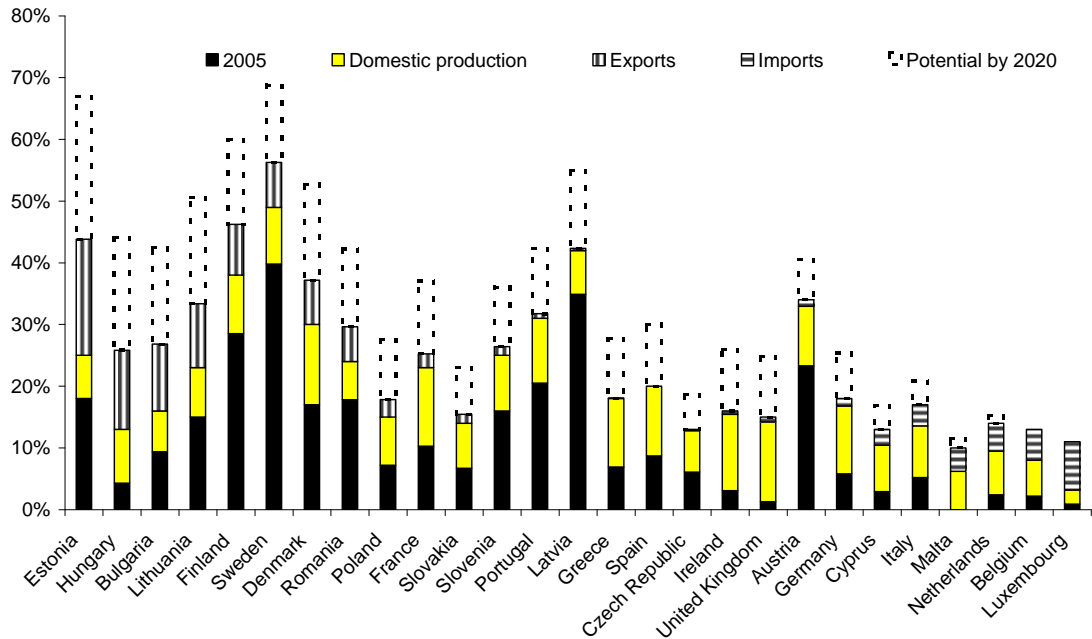
This approach by itself, however, would not have allowed for an efficient use of the renewable resource bases of different Member States. The available biomass, wind, hydro, tidal and wave and solar resource base varies significantly across Member States. In this context, Figure 1 provides an illustration by country¹, indicating the current RES deployment (as of 2005) and the proposed renewables target for 2020, as well as possible trade volumes, assuming that all Member States deliver the same target level (corresponding to their additional realisable resource potentials)².

¹ The present author is grateful to Dr Dörte Fouquet, Dr Karsten Neuhoff, Dr Mario Ragwitz and Dr Gustav Resch for permission to use this Figure here, which is taken from the forthcoming article (Johnston *et al* (2008)) which the present author and the aforementioned colleagues have co-written on this topic.

² Resource potentials are taken from the database of the Green-X model (www.green-x.at) – an independent computer tool enabling a comparative and quantitative analysis of the future deployment of renewable energies in all energy sectors (i.e. electricity, heat and transport), geographically constraint to the European Union. The database comprises consolidated information on potentials and corresponding cost for a broad basket of renewable energy technology options as applicable in the Member States of the European Union. The term ‘additional realisable potential’ refers to the unexploited fraction of the in total realisable mid-term potentials (up to 2020).

The current renewable share is shown (2005, bottom part of bar) and the estimated maximum share of renewables that can be reached in each country by 2020 given resource potential and annual build constraints is also marked (dashed line). According to this estimation all EU Member States (except Belgium and Luxembourg) can meet their target using domestic resources. However, even where countries could deliver their target with domestic resources, it might be more economical to cooperate internationally for the development of some of this potential. If all Member States were to develop the same share of the potential accessible by 2020, then the countries at the left-hand side of Figure 1 would develop renewables to meet their target level (grey) and additional renewable potential (vertical stripe) to assist the countries at the right-hand side in meeting their target. The countries at the right-hand side would meet some of their target with new domestic renewables (grey) and with transfers from other countries (horizontal stripe).

Figure 1 Renewables target relative to existing capacity – and traded volume if all Member States deliver the same target level



Source: Database of the Green-X model (www.green-x.at)

How this transfer could be pursued has been subject to much discussion during the drafting of the directive. In principle, the proposed directive would allow for two approaches, aiming simultaneously to achieve both of the objectives (efficient use of resources and fair burden-sharing). It is intended that Member States can:

- (a) trade their surplus or deficit of renewable generation at a government level; *and/or*
- (b) allow market participants to use a certain share of renewables, but can also give market participants the flexibility to trade guarantees of origin in other Member States (and it is made explicit that trade in GOs may take place independently of physical trade in the electricity generated).

The remainder of this paper will: discuss how both approaches are to be implemented (Section 2); then analyse in detail the legal issues arising from the proposals (Sections 3 to 7); before concluding (Section 8).

2. HOW ARE THE TWO APPROACHES TO TRADING TO BE IMPLEMENTED?

The basic unit defined by the proposed directive is a guarantee of origin (GO). This unit would be generated for every MWh of electricity and heat³ produced from a renewable generator. Two main approaches are available for dealing with these guarantees.

2.1 Trade at government level

To enable governments to trade with each other, they first have to be the ‘owner’ of the tradable value of the renewables delivered within their country. This is ensured by Article 8(1)(a) of the proposed directive, which requires that the “guarantee of origin ... shall be submitted for cancellation” in the Member State where it “receives support in the form of feed-in tariff payments, premium payments, tax reductions or payments resulting from calls for tenders”.

To ensure that Member States do not sell their own renewable value while failing to deliver against their domestic target, an indicative trajectory has been defined. Member States would only be able to sell GOs submitted for cancellation within its jurisdiction to another Member State if the selling Member State had met or exceeded the interim targets of its indicative trajectory in the immediately preceding two-year period (Article 9(1))⁴. This proposed Article seems to provide a useful incentive for European co-operation. A Member State which wants to buy GOs from another Member State is likely to provide ongoing technical and other support to ensure that the selling Member State delivers its domestic objective and produces guarantees of origin which can be exported.

Some EU Member States have voiced concerns that domestic policies designed to support renewables could be undermined by the possibility that individual installations could trade such guarantees of origin at the installation level. Most feed-in tariffs, for example, provide funding which is differentiated according to technology and sometimes also according to the resource availability at a specific site. Thus, renewables with a lower-cost technology or better available resource would receive less support under their domestic scheme. The investors might instead avoid all domestic support schemes and directly sell the guarantees of origin in another Member State which does not pursue such differentiation and thus might offer a higher price. This possibility would undermine the ability of Member States to implement technology and resource-differentiated support schemes, which are intended to support a technology portfolio and avoid high(er) consumer costs.

³ The inclusion of heating (and cooling) in the GO-scheme is limited to plants with a capacity of at least 5 MW_{th}.

⁴ It might be argued that this provision leaves open the question whether a MS has to exceed its trajectory only once (e.g. in 2011) and can then trade until 2020 or whether it has to be above the trajectory all the time. However, it seems likelier that it relates to *any* “immediately preceding two-year period” in which the Member State’s share has been greater than or equal to its indicative trajectory. I.e., that position *vis-à-vis* the trajectory must be established for the relevant preceding two-year period every time any such transfer is attempted by the exporting MS. See, further, the Commission’s explanations of the proposal (Commission (2008), p. 4, para. II.3) concerning the timing in this regard (no inter-government trading until post-2013, to allow for the two-year period to be assessed).

2.2 Trade at installation level

The proposed directive also offers a framework which would enable Member States to allow installations established on their territory to trade at installation level. According to its Article 8(1)(b), GOs “shall be submitted for cancellation ... [in the Member State where it] ... is taken into account for the purposes of assessing an entity’s compliance with a renewable energy obligation”. Thus, an installation could produce renewable energy in one Member State and transfer the GO to a second Member State, provided that the installation became operational after the Directive had entered into force (Article 9(3)).

The first challenge posed by such an approach concerns the potential volatility of trading. A country might well be on track to deliver its renewable energy targets in one year and then find itself outbid in the subsequent year by a fellow Member State which offers higher payments for sellers of GOs. To avoid the uncertainty associated with this possibility, Article 8(2) of the proposed directive would require that, “[w]here an operator has submitted one or more guarantees of origin ... [it] shall: (a) request guarantees of origin for all future production ... from the same installation [and] (b) submit these ... to the same [Member State]”. While such an approach would potentially reduce the liquidity of trade in guarantees of origin, this needs to be balanced by the need to ensure some predictability in meeting the relevant national renewables target set by the proposed directive.

Thus, the international inter-installation trade in GOs would be limited to the time of the initial investment, since the operation of Article 8(2) of the proposed directive would then require such GOs to be submitted for cancellation in the Member State into which that first trade took place. However, since stable revenue streams reduce the financing costs, most renewable projects (like conventional power projects pursued by project developers) require long-term contracts to hedge against the price risk. The constraint that would be imposed by the proposed Article 8(2) upon subsequent international re-trading of GOs might in practice have little negative impact upon the market.

Countries integrating their market for renewables based upon trade of GOs could create gateways to allow only certain volumes or types of GOs to be transferred using the feature of ‘prior authorisation’ (Article 9(2)). Under the proposed directive “Member States may provide for a system of prior authorisation of the transfer of guarantees of origin to persons in other Member States if [otherwise] it is likely to impair their ability to comply with [their renewable target or the] indicative trajectory” (Article 9(2), 2nd sentence). A further justification for the imposition by a Member State of such prior authorisation for (N.B.) imports *and* exports of guarantees of origin is “if [otherwise] it is likely to impair their ability to ensure a secure and balanced energy supply ... [or] the achievement of the environmental objectives underlying their support scheme” (Article 9(2), 1st sentence). However, this could introduce additional complexities and uncertainties into the market, which would be likely to reduce predictability and liquidity, thus undermining the stability required if the mechanism is to be used to drive investment decisions into low Carbon electricity generation, and might therefore be undesirable.

Thus, the clause on prior authorisation in principle allows Member States to prevent trade of guarantees of origin at the installation level. However, by virtue of the application of the principle of proportionality (given that, *prima facie*, such a requirement of prior authorisation infringes Article 28 of the EC Treaty)⁵, this would be permitted only insofar as the justifying reasons explicitly laid down in Article 9(2) of the proposed directive could not be achieved by measures less restrictive of trade between Member States (see, e.g., recital 21 to the proposed directive).

Systems of prior authorisation inherently should not be abused, e.g. as a means of arbitrary discrimination against exports or imports of guarantees of origin (see, again, recital 21 to the proposed directive and Article 30 of the EC Treaty). At the very least, this would mean that Member States would have to take constant and great care to ensure that neither export nor import constraints discriminated between guarantees of origin solely on the basis of their country of destination or origin, respectively. These legal matters are discussed further (in Sections 3 to 7) below.

The proposed directive would therefore allow Member States to implement and insulate their domestic support scheme for renewables, and instead to pursue the trading of guarantees of origin at the government level. However, it is also clear that the proposals would require Member States to justify exactly why and how far such ‘insulation’ of their domestic scheme was required, on the basis of the specific criteria laid down in Article 9(2). Consequently, it remains an open question whether the measures given in Article 9(2) are sufficient effectively to protect the domestic support system against private trade of GOs.

2.3 The basic structure

The purpose of the GOs is to support investment in renewable energy technologies. Investment requires a simple and transparent framework.

The above discussion suggests that the proposed directive allows Member States to make a clear choice as to whether they want to pursue a national support scheme and trade at government level or whether they want to link an installation-based trading scheme with other Member States that wish to do so.

The proposed directive is not, however, explicit about whether or not this amounts to an ‘either/or’ choice, and would thus in theory also allow Member States to pursue a hybrid strategy. While such a strategy might be exciting for economists to describe and explore, it might be even more exciting for market participants to exploit the loopholes which tend to emerge with the implementation of new, untested and complex market structures. This suggests that Member States might want to be cautious when considering a hybrid approach and might rather be better advised to decide clearly in favour of one or other of the two approaches.

The following Sections explore further whether, and if so how far, Member States have the opportunity to opt for a system based purely upon inter-government trade by fully excluding the option of trade by private participants.

⁵ See, e.g., Case 72/83 *Campus Oil v. Ministry for Industry and Energy* [1984] ECR 2727.

3. LEGAL CHALLENGES FOR IMPLEMENTATION - INTRODUCTION

A number of legal issues might be canvassed with regard to the proposed directive: standard issues for analysis in any legislative proposal concern the appropriate legal basis in the EC Treaty for the adoption of an EC measure⁶, and whether that measure satisfies the criteria of subsidiarity and proportionality applicable to any proposed EC legislation by virtue of Article 5 EC.

As drafted, the proposed Directive raises at least some legal uncertainty as to whether it introduces a new harmonised trade for a specific good: i.e. does it intend to set up GOs as ‘the’ tradable green certificate? This is then linked to the next layer of legal uncertainty concerning the question of whether the exemptions provided for in the proposal would be sufficient clearly to ensure the continued legal viability and stability of national support mechanisms.

Linked to this are questions which concern the appropriate interpretation of the provisions concerning the operation of GOs (their submission, cancellation and transfer), and how those provisions interact with the EC Treaty rules concerning the free movement of goods (in particular Articles 28 and 30 EC).

3.1 Pre-emption?

First, it should be noted that the proposed directive does not directly and explicitly provide for the replacement (or ‘pre-emption’, in the jargon) of Member States’ national policies for the promotion of electricity generation from renewable sources. Article 8(1)(a) of the proposal specifically envisages that the operation of national support schemes⁷ for renewables may be maintained, providing that electricity generated from such a supported source must submit its GOs for cancellation to the supporting Member State (to avoid double funding, as the Commission has explained)⁸. Further, Article 9(2) of the proposal allows the Member State to subject transfers of GOs into or out of that state to a “prior authorisation system” where transfers would otherwise be “likely to undermine the achievement of the environmental objectives underlying their support scheme”. This presumes that such support schemes must be possible in the first place (subject, of course, to any constraints imposed by the standard EC law rules concerning State aid, tax discrimination and the free movement of goods – a point to which we will return below). Indeed, in its recent clarifications to the Council the Commission has confirmed that:

⁶ Here, the Commission has relied upon Article 175 EC for the bulk of the proposed directive’s environmental implications, alongside Article 95 EC for Arts. 15 to 17 of the proposal (which focus upon harmonising sustainability criteria for the trade in biofuels): since both of these legal bases provide for the use of the co-decision procedure (requiring involvement and approval of both the Council and the European Parliament) this dual legal basis is procedurally unproblematic here.

⁷ Defined in Article 2(h) of the proposal as “a scheme, originating from a market intervention by a Member State, that helps energy from renewable sources to find a market by reducing the cost of production of this energy, increasing the price at which it can be sold, or increasing, by means of a renewable energy obligation or otherwise, the volume of such energy purchased”. Note that this is merely a definition of such schemes for the purposes of the operation of Arts. 8 and 9 of the proposed directive, *not* an attempt to establish national measures in a category which will then somehow be excluded or covered over by the proposed directive’s scope of coverage.

⁸ Commission (2008), p. 4 (para. II.2): the same applies to Article 8(1)(b) where that electricity is included in complying with a ‘renewable energy obligation’ (i.e. under a green certificate system).

“[t]he new GO system can be combined with existing systems of Tradable Green Certificates or even with feed-in and premium systems. Such integration would be determined by Member States on a case-by-case basis”⁹.

From this wording alone, one may not deduce that the mere existence of the new tradable instrument of a GO as a result of the proposed directive would exclude the continuing operation of national support or subsidy measures for renewables.

3.2 Introducing the ‘Guarantee of Origin’ – creating a new ‘good’

However, the legal effect of the proposal would be to introduce a new tradable certificate in the form of the GO, particularly since it is clear (Article 9(3), 2nd sentence) that GOs may be transferred accompanying “the transfer of the energy to which the [GO] relates, *or* may be separate from any such transfer” (emphasis added). Thus, the proposal would create a new ‘good’ (in the sense that it “can be valued in money and which [is] capable, as such, of forming the subject of commercial transactions”)¹⁰, the free movement of which would in principle be protected by Article 28 EC against restrictions imposed by Member States upon the trade of such goods. This *prima facie* prohibition, however, would be subject to any justifiable restrictions upon such free movement. However, importantly, the legal effect of the introduction at the EC level of such trade in GOs would be that any restriction upon this trade, e.g. based upon the grounds of protecting and upholding the national support mechanisms such as the Feed-in Tariff systems, has to be seen as a barrier to trade. Thus, the national systems would fall from the current scheme of being independent legally sustainable national mechanism into the legal category of unsustainable obstacles to trade. On the one hand, it can be argued that such national measures were in principle subject to these free trade rules in any event, as a result of the Court’s jurisprudence in the field of Article 28 EC (in particular, *PreussenElektra*, discussed in detail below), which typically focuses upon the *effect* of such national measures, rather than their objective. But it should also be acknowledged that this point is not absolutely certain, which doubt could itself have an impact upon the reactions of investors under the regime intended by the proposed directive.

3.3 Free movement of goods – general points

The presumption of free trade in GOs as goods is reinforced by the default position established by Article 9(3), 1st sentence, of the proposed directive. Unless Member States choose, and are able, to utilise the provisions in Article 9(2) concerning prior authorisation, the first sentence of Article 9(3) allows private parties located in different Member States freely to transfer GOs to each other (subject only to the condition that the installation which generated the GO became operational after the date of the directive’s entry into force). It is apparent, therefore, that the system of prior authorisation for transfer of GOs is on its face a restriction upon trade in GOs and will therefore require justification. Since the electricity produced does not need to be transferred as well, the ‘virtual’ nature of GO exchange allows traders to come into the scheme, alongside or independently of the renewable generation installation.

⁹ Commission (2008), p. 3, para. II.1. Note also that the Commission in its Explanatory Memorandum points out that Member States “retain” (subject to achieving the binding renewables target) “wide discretion to favour the development of the renewable energy sector in the way that suits their national potential and circumstances best” (p. 9, para. II.3).

¹⁰ Case 7/68 *Commission v. Italy* (Italian Art Case) [1968] ECR 423.

3.4 Justifying *prima facie* restrictions upon free movement – the ‘prior authorisation system’ and Article 28 EC – background

Given the foregoing analysis, the key issue thus concerns whether the proposal secures and justifies such a prior authorisation system, in the face of the prohibition laid down in Article 28 EC. The proposal for the Directive does not explicitly create a fully harmonised and unified trade system for GOs. However, the extent to which any Member State restrictions upon such trade in GOs can be justified needs to be analysed. In the absence of EC harmonisation measures, Member States remain free to adopt such rules, provided that they pursue a legitimate objective and are proportionate (in the sense that the extent of any restriction upon trade must go no further than necessary to achieve that legitimate goal).

A prior authorisation system amounts to direct discrimination against imports and/or exports, on the basis that the reason for the restriction upon trade relates directly to the origin/destination of the good in question. Traditionally, such measures could only benefit from a derogation from the Article 28 EC prohibition if they fell within the grounds listed in Article 30 EC¹¹, but more recent case law has suggested a more flexible approach to the justification of such restrictions upon trade (at least in the environmental field)¹². This flexibility is exemplified by the judgment of the Court of Justice (‘ECJ’ or ‘the Court’) in *PreussenElektra*, a detailed treatment of which is provided below (in Section 4 of this paper). In its judgment in *PreussenElektra*, the Court did not clearly establish the nature of the restriction (in terms of its discriminatory effect) upon trade created by the former German power feed-in law, which has clear differences from the current German law, but the Court was willing, “in the current state of Community law concerning the electricity market”, to acknowledge that the old German law was “not incompatible with Article 28”. This was because such legal provisions aimed at the “protection of the environment” by contributing to the reduction in emissions of greenhouse gases (although the Court also referred to the protection of the life and health of humans, animals and plants – an Article 30 derogation – in its reasoning). The judgment in *PreussenElektra* would clearly be the first port of call for any Member State seeking to justify a restriction such as the prior authorisation regime envisaged by the proposed directive. Thus, it is to a detailed analysis of this case which we now turn.

4. THE *PREUSSEN ELEKTRA* CASE AND ITS IMPLICATIONS

4.1 Facts and legal background to the case

The German *Stromeinspeisungsgesetz* (StrEG)¹³ laid down a system to ensure that energy produced from renewable sources can gain access to the grid and thus to the national market. In line with the policy to support renewable energy, all ‘electricity supply undertakings which operate a general supply network’ were obliged to purchase all of the renewable electricity¹⁴ produced within their area of supply¹⁵.

¹¹ Including, *inter alia* (and for our purposes most relevantly): public policy, public security and the protection of the health and life of humans, animals and plants.

¹² See, e.g., Case C-379/98 *PreussenElektra v. Schleswag* [2001] ECR I-2099, and the cases discussed in the Opinion of Advocate General Jacobs. This point is discussed further in Section 4 of this paper.

¹³ Gesetz über die Einspeisung von Strom aus erneuerbaren Energien in das öffentliche Netz, 7 December 1990, BGBl. I p. 2633 *et seq.*; 1994 p. 1618 *et seq.*; 1998 p. 730 *et seq.*; see http://www.umwelt-online.de/recht/energie/ein_ges.htm.

¹⁴ From specified sources: water, wind, sun and biomass (Para. 1 StrEG 1998).

¹⁵ Para. 2(1), StrEG 1998 (BGBl. 1998 I, 730).

Furthermore, they had to pay a fixed minimum price for that electricity, calculated on the basis of the average nationwide sales price for electricity. These prices were set at such a level as to provide, in effect, a subsidy to generators of renewable electricity. Under the original incarnation of this law in 1990, price levels had been set at 90% of the average sales price for wind-generated electricity¹⁶ and 75% for other sources (increased to 80% by an amendment passed in 1994)¹⁷. Over time, the level of subsidy in real terms had risen as production levels and efficiency, particularly in the wind power sector, had increased. The Commission had been keeping a close eye on these developments and had voiced its concerns that the German system was incompatible with Community State aid law.

It had even suggested changes to the method for the calculation of the subsidies involved¹⁸. Changes wrought by the 1998 legislation¹⁹ implementing Directive 96/92/EC provide for a new compensation mechanism for the distributor in cases of ‘hardship’. Much of the Advocate General’s Opinion and the Court’s judgment in *PreussenElektra* dealt with this issue and it is sufficient for our purposes to note that both Advocate General Jacobs and the Court of Justice concluded that this complex of duties which provides support for renewable energy producers did not amount to State aid. This was basically because the support came directly from the utilities and not from state resources²⁰.

However, the author would like to focus here on the discussion of the compatibility of this purchasing obligation with the free movement of goods²¹. The original legislation referred only to the obligation on the electricity suppliers to purchase electricity generated from renewable sources ‘within their area of supply’: as drafted, this could only cover power produced in Germany. The introduction in 1998 of a new rule concerning ‘off-shore installations’ seems to underline the national focus of this obligation: renewable electricity produced in an installation situated outside a supplier’s area must be purchased by the operator of the network located closest to that installation²². When read with the new Paragraph 1 of the 1998 law, it is clear that the obligation applies only to electricity that has been generated in Germany. There are some significant difficulties in making an assessment of the purchasing obligation under Article 28 EC: the exact impact of the 1998 law on the importation of electricity from other Member States is at best unclear; it is difficult to establish whether imports of renewable electricity are even technically feasible and it is especially tricky to distinguish such power from that generated from conventional sources²³.

¹⁶ Para. 3(2), StrEG 1990 (BGBl. 1990 I, 633).

¹⁷ BGBl. 1994 I, 1618.

¹⁸ Letter to the German Government, 25 October 1996, following complaints by the electricity supply undertakings about the impact of the renewables purchasing obligation upon them.

¹⁹ *Gesetz zur Neuregelung des Energiewirtschaftsrechts* (Law reforming the Law on the Energy Supply Industry) (BGBl. 1998 I, 730).

²⁰ Environmental campaigners welcomed this ruling, although for them the logic behind such support measures is that ‘electricity prices do not reflect the environmental costs incurred by other forms of power generation’ (*EU Energy Policy*, Issue 142, 31 October 2000). For discussion of these matters, see (e.g.) Bronckers & van der Vlies (2001) and Baquero Cruz & de la Torre (2001).

²¹ It seems clear that electricity is treated as a good for the purposes of the EC Treaty: see, e.g., Case 2/64 *Costa v. ENEL* [1964] ECR I, Case C-393/92 *City of Almelo v. Energiebedrijf IJsselmij* [1994] ECR I-1477, Case C-158/94 *Commission v. Italy* [1997] ECR I-5789; Case C-213/96 *Outokumpu Oy* [1998] ECR I-1777 and Cases 157, 158, 159 and 160/94 the ‘*Energy Cases*’ (enforcement actions by the Commission against the Netherlands, Italy, France and Spain respectively).

²² Para. 2(2), StrEG 1998.

²³ Para. 195 of the Opinion of Advocate General Jacobs in *PreussenElektra*, delivered on 26 October 2000 (hereafter, ‘the Opinion’). The Court made a similar point in para. 79 of its judgment. (N.B. The opinion and judgment use the old EC Treaty numbers, while this paper uses those in force after the Amsterdam Treaty for convenience.)

From a purely free movement of goods perspective, *PreussenElektra* raises some important questions in that it constitutes a further threat to the already shaky consistency of the Court's case law on discriminatory restrictions to trade. The ECJ has introduced a double system of justifications: indistinctly applicable rules – capable of hindering trade – may be justified according to the mandatory requirements of public interest, whilst discriminatory restrictions may be justified only according to the (exhaustively listed) Treaty derogations. However, environmental protection was not a matter of sufficient concern when the Treaty was drafted and is thus not mentioned as one of the grounds which allows a departure from the Treaty.

The Court thus faced a conundrum: was it to declare the measure unlawful even though it had been adopted in pursuance of an interest widely felt to be of great importance? Or was it to disregard its own case law so as to be receptive to the challenges faced by modern industrial societies?

The Court chose a pragmatic approach: environmental protection is indeed a primary goal of the Community and Member States' measures which pursue such goals as the one at issue may be so justified. Whilst the Court's preference for allowing Member States to pursue environmental protection is welcome, *PreussenElektra* added confusion and legal uncertainty for economic operators and national courts: to what extent can discriminatory measures be justified on grounds not contained in Article 30? Is environmental protection the only ground which can be added to the list, or are there others? Does the distinction between indistinctly applicable measures and discriminatory measures, and between mandatory requirements and the Treaty derogations, still hold good²⁴?

4.2 The Opinion of Advocate General Jacobs

Advocate General Jacobs found that Article 28 indeed applied, since, according to consistent case law electricity is to be considered a good. On the basis of established case law, there was for Advocate General Jacobs little difficulty in establishing that such a measure has an effect equivalent to a quantitative restriction: *Campus Oil* made clear that any obligation to purchase a certain amount of products from a national source acts so as to restrict the ability of importing that same product from another Member State. By its restriction to German-produced renewable electricity, the StrEG favoured the “marketing of electricity of German origin to the detriment of imported electricity”: indeed, Schleswig asserted that it had been offered Swedish renewable electricity at a reasonable price, but had been forced to decline to purchase it due to its obligation to take all of the wind-generated electricity from its own supply area²⁵.

Could this infringement be justified? Any argument based upon maintaining the security of supply would seem to be doomed in this context. Advocate General Jacobs's remarks on the *Campus Oil* case are fully in line with the clear analysis of Advocate General Cosmas in his Opinion on the *Energy Cases*²⁶. He stressed the dangers of an *interruption* in oil supplies that could threaten the *very existence* of the country, so that the fact that the Irish rules were designed to ensure the availability of a minimum supply would allow a public security justification.

²⁴ The distinction has recently come under attack by some authors, as well as by Advocate General Jacobs.

²⁵ Paras 200-202 of his Opinion. Without arguing the point, Advocate General Jacobs advised that, even if a *de minimis* rule does exist under Article 28 EC, the figure of 1% of total German electricity consumption provided by renewables could not be viewed as negligible. Hence, the mechanism of the StrEG was in principle an infringement of Article 28 EC.

²⁶ Delivered on 26 November 1996, [1997] ECR I-5701, paras. 69-85, esp. para. 81ff.

These strict criteria are reflected in Advocate General Jacobs's swift dismissal of the argument: he commented that "wind as an energy source is not yet as important for the modern economy as petroleum products. The special economic role of petroleum products was a decisive factor in the Court's rather exceptional judgment in *Campus Oil*".

Of both greater interest and difficulty is the argument that environmental protection could justify the restriction. First of all, it is important to characterise the nature of the restriction in question: here, it is clear that renewable electricity of foreign origin is treated differently, both in law and in fact, from that produced in Germany²⁷. The Advocate General then proceeded to analyse whether, notwithstanding such discrimination, the rules could be justified under the Treaty on environmental protection grounds.

In this context, Advocate General Jacobs stated that that case demonstrated that it might be desirable that directly discriminatory measures be justifiable on environmental protection grounds. Thus, highlighting the confused state of the case law, he found the time ripe for the Court to clarify its position and that "a more flexible approach" is desirable in case of the imperative requirement of environmental protection. In order to strengthen his view, the Advocate General relied upon Article 6 EC – which states that environmental protection is one of the principles informing all Community policies – finding that Article 6 is not merely programmatic but rather imposes legal obligations. Further, he found that since environmental measures are likely to be inherently discriminatory, a consideration reflected also in Article 174(2) EC [*ex* 130r(2)], which provides that "environmental damage should as a priority be rectified at source", the exclusion of discriminatory measures from the environmental protection justification would risk undermining the very purpose of the national measure. He thus suggested that environmental protection could be properly invoked in this case and proceeded to analyse the proportionality of the measure. He found that the fact that the measure was trying to rectify the damage produced by greenhouse gas emissions failed to satisfy the proportionality requirement, since energy produced from renewable sources outside Germany would reduce greenhouse gas pollution to the same extent. As to the whether or not the measure was justified because of possible loss of energy through transmission over long distances, the Advocate General left the assessment to the national court.

4.3 The judgment of the Court

The Court found the rules at issue "not incompatible" with Article 28; after having found the measure to be capable – at least potentially – of hindering intra-Community trade, it proceeded to assess whether "such a purchase obligation is nevertheless compatible with Article [28]", having regard to its aim and/or the particular features of the electricity market.

The Court referred to various sources and reasons which made the measure not incompatible with Article 28: thus the measure sought to combat greenhouse gases, one of the main causes of climate change which both the Community and the Member States have pledged to combat in international Conventions. Further, the policy also aimed at protecting "the health and life of humans, animals and plants", and Article 130r(2) [now 176(2)] EC, as well as (after the entry into force of the Treaty of Amsterdam) Article 6 EC require environmental protection to be integrated in Community policy. The Court referred to the electricity internal market directive²⁸ then in force and to the fact that it is difficult to determine the origin of electricity once it is introduced in the distribution system.

²⁷ Para. 220 of his Opinion.

²⁸ Directive 96/92/EC OJ 30.1.1997 L27/20.

It drew support for this view from the Commission's proposal that a system of certificates of origin for electricity produced from renewable sources should be established in order to make trade in that type of electricity reliable and possible in practice. It concluded that "in the current state of Community law concerning the electricity market, legislation such as ... [that at issue] is not incompatible with Article [28] of the Treaty."

4.4 Analysis I – Mandatory requirements and other justifications/derogations

The Court once again was called upon to reconcile the impossible: legitimate environmental concerns and its previous case law on free movement of goods. Detailed discussion of the implications of the Court's approach has been provided elsewhere²⁹: here, it suffices to note that the Court's reasoning does not provide a clear answer to the question of exactly how the German measure was found not to create problems under Article 28 EC. The two basic possible interpretations are:

- the mandatory requirements (such as environmental protection) developed by the Court as inherent to the notion of a restriction within Article 28 EC were expanded so as to be able to justify even directly discriminatory national measures;
- a combination of Article 6 EC (which provides that environmental protection must be integrated into the definition and implementation of all Community policies mentioned in Article 3 EC), Article 174 EC (rectifying environmental damage at source) and an extended reading of Article 30 EC's express derogating ground concerning measures to protect the "health and life of humans, animals and plants" allowed the directly discriminatory national measure to escape the Article 28 prohibition.

Each of these approaches involves certain difficulties – the former resembles a judicial addition to the express derogating grounds in Article 30 EC (arguably an illegitimate use of the judicial function, given that unanimous Member State approval is required to amend the EC Treaty); the latter raises technical questions concerning the proper ambit of Articles 6 and 174 EC and their possible influence upon Article 30 EC. The present author submits, however, that the latter rationalisation is preferable in establishing legal certainty in this area without doing significant violence to the rest of the Court's case law on mandatory requirements. If we examine the judgment carefully:

- in para. 74 the Court highlighted that the EC and its Member States are members of UNFCCC and Kyoto Protocol, and also emphasised the importance of these environmental objectives as evinced by various Resolutions adopted, and programmes (such as ALTENER)³⁰ developed, by the Community; and
- in para. 75 the Court tied this discussion in with protection of health and life of humans, animals and plants, and thus explicitly connected such objectives with Article 30 EC (i.e. the express Treaty derogations from Article 28 EC);
- then, in para. 76 the Court underlined the legal requirement laid down in the EC Treaty itself that environmental objectives must be integrated into other EC policies (relying upon the old Article 130r(2) EC and the current Article 6 EC).

²⁹ See Johnston *et al* (2008).

³⁰ See http://ec.europa.eu/energy/res/altener/index_en.htm for details of the ALTENER and ALTENER II programmes on renewable energy, whose objectives are now incorporated in the EC's 'Intelligent Energy – Europe' programme (on which see http://ec.europa.eu/energy/intelligent/index_en.html).

Drawing the strands of the earlier discussion together with this summary, this suggests that reliance upon Article 6 EC, possibly in conjunction with Article 30 EC, may well provide the most secure foundation for the approach taken by the Court in *PreussenElektra*, without doing significant violence to the approach taken by the Court in its previous case law on mandatory requirements under Article 28 EC.

4.5 Analysis II – Energy implications

The judgment is a clear recognition by the ECJ of the perceived need for EC action, since the Community has committed itself to emissions cuts under the Kyoto Protocol. The Court also emphasised the way that such action accords with declared policy priorities and earlier programmes within the EC. This statement forms a major contextual point for the rest of the relevant ‘considerations’ which it went on to take into account. It was also clear that major legislative proposals were known to be under discussion, both in the field of greenhouse gas emissions trading schemes³¹ and of a climate change programme in general³². The Court’s permissive and hands-off approach here made sense in a climate of relative uncertainty as to the exact shape of future, specific legislative proposals in a sensitive area.

One might also highlight the potential dangers of the perhaps blunter approach under Article 28 EC, not allowing for the practical difficulties that might be encountered in the relevant situations under such national renewables promotion schemes. For example, Advocate General Jacobs suggested in his Opinion that the proportionality of the German measures might undergo quite strict testing by the national court when the case returned to it from the ECJ. He made a number of comments which highlighted particular areas in the operation of the StrEG which he thought would need further and careful investigation: it suffices here to highlight his argument that the generation of electricity from renewable sources in other Member States which could then be sold to Germany would be equally effective in securing reductions in greenhouse gas emissions, thus meaning that (for him) the claimed environmental justification for the restrictive effects of the StrEG upon trade was not proportionate to the goal to be achieved.

Interestingly, however (and published in the Official Journal almost contemporaneously with the Opinion of Advocate General Jacobs in *PreussenElektra*), the Commission in its Explanatory Memorandum to the proposal for what became the current Renewables Directive, explored some of these trade issues in the context of possible future harmonisation. The danger Advocate General Jacobs’s suggestion that the nationality ground be removed and foreign electricity allowed access to the German grid on similar terms “is that the co-existence of different schemes, even if open to foreign producers, may lead to distortions of the market, e.g. when all [renewables] producers will try to benefit from the national system offering the best conditions, e.g. in terms of prices paid”³³. Furthermore, there was a generally perceived wisdom shared among those in the drafting and negotiation process that we are still at too early a stage to propose the exact shape of any more comprehensive harmonisation of these schemes – the Commission, the Economic and Social Committee and the European Parliament were at one on this issue.

³¹ See Commission (2000a).

³² See the Commission’s proposal at the time to establish a ‘European Climate Change Programme’ (Commission (2000b)).

³³ ‘Proposal for a Directive of the European Parliament and of the Council on the promotion of electricity from renewable energy sources in the internal electricity market’ COM(2000)279 final, 10 May 2000 (OJ 31.10.2000 C311/320; originally submitted by the Commission 31 May 2000), at 6. Advocate General Jacobs’s Opinion in *PreussenElektra* was handed down on 26 October 2000.

And it is tolerably clear that this position continues to prevail in 2008, during the process of negotiating the latest proposal for a new renewables directive.

5. ARE NATIONAL SUPPORPT MEASURES FOR RENEWABLE ELECTRICITY REALLY ‘TRADING RULES’ WITHIN ARTICLE 28 EC AT ALL?

It should be underlined, however, that the position and reasoning of the ECJ in *PreussenElektra* could be revisited even under the current Directive 2001/77/EC for the promotion of renewable energies³⁴.

In general, it is not crystal clear whether the outcome of a “*PreussenElektra II*” before the Court would automatically lead to the enforcement of the EC trade rules with respect to Feed-in Tariffs (‘FiT’) (such as under the current German law). Nor is it certain that the Court would either uphold such barriers as justifiable or require their modification or removal. Article 28 *et seq.* EC are only applicable to Member State measures which themselves are trade mechanisms or a measure having an effect equivalent to such direct trade barriers. One can question whether FiT mechanisms, and especially the current German FiT law (the *Erneuerbare Energien Gesetz* (EEG)), amount to a ‘trading rule’ or measure falling within the scope of Article 28 EC. *PreussenElektra* only dealt with the predecessor of the EEG, the StrEG. Advocate General Jacobs suggested in his Opinion³⁵ that the StrEG did not serve the purpose of securing energy supply³⁶. But the current German EEG is more specific on this point. Paragraph 1(1) EEG³⁷ strongly emphasises that the law serves the purpose of the sustainable development of national energy supply as well as promoting electricity generated from renewable sources (‘RES’). Paragraph 1 further states that RES are domestic energy sources which are able to contribute to the independent supply of energy and to the security of supply. The German FiT law also enables Germany further to diversify its national energy mix in order also to fulfil its obligation from the law on phasing out of Nuclear Power in Germany “*Gesetz zur geordneten Beendigung der Kernenergienutzung zur gewerblichen Erzeugung von Elektrizität*”³⁸.

The EC Treaty is based upon the principle that the EC may act to legislate only in fields where the Treaty has conferred competence upon the EC to act. In areas of activity where that competence is shared between the EC and its Member States, the EC must establish a legal basis for its action and must also justify the need for action on the EC level (satisfying the principle of subsidiarity) and for that extent of action (proportionality). Only then can a Member State be required to apply EC legislation in place of its own national rules on the subject.

³⁴ The RECS green certificate trade initiative has already announced that legal action against further maintaining of Feed-in Tariff systems as national support mechanisms could be feasible: RECS International, ‘Trade barriers to renewable energy in conflict with EU market laws’, (Press Release, 26 October 2007); RECS International, ‘Barriers to renewable energy in conflict with EU market laws’, (Press Release, 26 October 2007: Summary of a workshop jointly organized by RECS International and DLA Piper, London on 17 October 2007).

³⁵ Para. 209 of the Opinion of Advocate General Jacobs in *PreussenElektra*. It should be remembered, however, that the Advocate General: pointed out (para. 195) that the Court was not fully informed of the relevant facts on the issues relating to the free movement of goods, suggested that the oral procedure might be reopened to gain more information and highlighted that only tentative conclusions on those matters were possible in the circumstances (both para. 196).

³⁶ It should be noted, however, that the Court clearly did not reach the same overall conclusion as its Advocate General on the case; yet the Court’s reasoning does not allow us to draw specific conclusions as to its position on this particular issue.

³⁷ Promotion of Renewable Energy Sources Act (*Gesetz zur Förderung Erneuerbarer Energien*), as amended in 2004, BGBl. I 2004, p. 1918 *et seq.*; vid. <http://www.erneuerbare-energien.de/inhalt/5982/>.

³⁸ Bundesgesetzblatt Teil I Nr. 26, 26 April 2002

However, Member State rules which fall within the scope of directly effective provisions of the EC Treaty (such as Article 28 EC) may still need to be disapplied at national level unless they can be justified according to the Treaty, the Court's case law or any relevant EC legislation. The extent of this impact of such Treaty provisions obviously depends upon the scope of such provisions, as interpreted by the ECJ.

It must be evaluated on a case-by-case basis whether or not any given national measure, such as the FiT mechanism, constitutes a measure having equivalent effect in the light of the wording of Article 28 EC and thus amounts to a trade measure. It could be argued that a national FiT system itself might not be a measure which has an effect equivalent to a rule which regulates the cross-border trade in electricity. Instead, it could be argued that a FiT system amounts to a political instrument for the promotion of renewable energy which serves a complex variety of elements within a national energy policy. This argument is reinforced by current discussions concerning the further development of FiT systems such as the German law by opening the national FiT system up to allow access to the national support mechanism for electricity produced outside the relevant national system³⁹. To this extent, therefore, it can be argued that there is strong evidence that, were the issue to be raised before the ECJ again, the Court might well recognize it as a national energy policy instrument and not a trade mechanism⁴⁰.

Under the currently proposed definition of 'support mechanism' for the new Directive and the introduction of a new trade system, Member States' arguments in favour of their national support mechanisms being treated as policy and not trade instruments would be weakened. This is especially the case in view of the fact that the proposal would no longer privilege a support mechanism restricted to generators established on the national territory, as is (arguably) currently ensured under Dir. 2001/77/EC.

This argument is based upon the following provisions of the Directive. First, some of the Recital 14 acknowledges that Member States operate different support mechanisms at national level. Further, Recital 10 clarifies that the guarantee of origin required by the Directive's Article 5 does not require a Member State to recognise a purchase of a guarantee of origin from another Member State as contributing towards the first Member State's obligation, nor does the guarantee of origin imply the right to benefit from that other Member State's national support mechanisms. Recital 12 highlights that the EC's Guidelines for State aid for environmental protection recognise the need for public support in favour of renewable energy sources ('RES'). In general terms Recital 1 emphasises that there is a strong need for the EC to promote RES to achieve environmental and sustainable development goals. Meanwhile, Article 2(d) of the Directive defines the "consumption of electricity" as primarily including "national electricity production" (emphasis added).

³⁹ Moreover there is one aspect which is often neglected in the discussion of 'trade measures': at time of the *PreussenElektra* case there was (both for the judgment and for the Opinion of Advocate General Jacobs) little data available as to what other Member States do in view of installing and keeping their support mechanisms reserved for the national RES production (at the time of the facts of the case, Dir. 2001/77/EC had not yet been adopted). In fact, all EU Member States have national support mechanisms which restrict access to national generation only, including Finland with its tax support mechanism. It is also not impossible that the British system might introduce such restriction in the future, at least in light of cherry-picking. This information then leads us back to the questions whether, first, such national measures are really 'trading rules' at all and, second, even if they do amount to trading rules can they nevertheless be justified under either Case 120/78 *Cassis de Dijon* [1979] ECR 649 and its progeny or Article 30 EC (as discussed in *PreussenElektra* itself).

⁴⁰ On the issue of distinction between a trade measure and a policy instrument, see Matthies (1995), para. 8; see also Fouquet & Prall (2005); on the question of the definition of 'trade measures' and of 'support mechanisms' in the proposed directive and the explanations of the proposal given by the European Commission, see Fouquet & Johansson (2008).

In conjunction with the provisions of Article 3, concerning the setting and monitoring of *national* indicative RES targets, and with the Annex to the Directive (which specifies the reference values for those national targets), this establishes an argument that the Directive specifically envisages that Member States can adopt national RES promotion measures the benefit of which could be limited purely to national generation capacity⁴¹.

At the same time, it should be acknowledged that nothing in the text of the Directive explicitly and clearly guarantees the justifiability of such national RES support measures against the application of, e.g., Article 28 EC requiring the possibility of access to the benefit of such national measures by electricity generated in another Member State⁴². This suggestion to make explicit that such measures are acceptable under free movement law is developed below (see para. 7.2).

6. JUSTIFICATIONS – SPECIFIC GROUNDS AND THE INTERPRETATION OF ARTICLE 9(2) OF THE PROPOSED DIRECTIVE

Under the proposed directive there would clearly exist a degree of EC harmonisation on the issue of justifiable restrictions upon trade in such circumstances, in the form of the provisions of Article 9(2). For the sake of the argument and balance in the interpretation of the proposal, it is assumed in the following that FiT systems in general would constitute measures having equivalent effect to a quantitative restriction upon trade. The effect of the provisions in Article 9(2) of the proposal is summarised below (Table 1). Where such harmonisation exists, the Court has held from the earliest cases in this field⁴³ that, to the extent that those harmonising measures exclude inconsistent national rules, to justify restrictions upon trade Member States may only have recourse to the harmonised provisions. At the same time, it is also tolerably clear that such harmonisation measures cannot by legislation authorise restrictions upon trade which would not themselves have fallen within acceptable grounds of derogation or justification under the EC Treaty. For the purposes of argument here, it will be assumed that all of the grounds listed in Article 9(2) of the proposal would satisfactorily have fallen within those parameters, either as a matter of public security (in the sense of secure supplies of energy resources)⁴⁴ or of environmental protection (as in *PreussenElektra* itself or by virtue of their connection with the protection of the health and life of humans, animals and plants).

With this background in place, it only remains to analyse the extent to which Article 9(2) provides a practicable basis upon which a Member State could justify the introduction of a prior authorisation system. It is important to emphasise that, in the key test case of a system seeking to introduce such a system to safeguard the operation of a domestic feed-in tariff, the provisions of the proposed directive limit the grounds of justification only with regard to the prior authorisation system itself.

⁴¹ This argument also reflects the position taken by the German Government (German Government (2008)).

⁴² E.g. the asterisk footnote to the Annex to the Directive only explicitly states that Member States may assume that the EC's *State aid* rules and guidelines allow the adoption of national support measures: nothing is said about the free movement rules in that connection. Further, it could be argued Article 4 of Dir. 2001/77/EC actually seems to indicate the opposite – “the Commission shall evaluate the application of mechanisms used in Member States according to which a producer of electricity, on the basis of regulations issued by the public authorities, receives direct or indirect support, and which could have the effect of restricting trade”. The reference to trade restrictions goes further than a mere ‘effect upon trade’ required under the State aid rules, and seems to be a reference to Article 28 EC considerations.

⁴³ See, e.g., the seminal judgment *Cassis de Dijon*.

⁴⁴ See *Campus Oil*.

Any challenge to the “underlying” feed-in tariff would still fall to be considered under the Treaty rules for justifying such a system, so that the reasoning in *PreussenElektra* would still seem applicable⁴⁵.

With regard to the proper interpretation of the justification provided by Article 9(2), 1st sentence, for a Member State to decide to subject the transfer of GOs to a prior authorisation system, one of the key questions will be the scope of the notion that allowing transfers “is likely to undermine the achievement of the environmental objectives underlying their support scheme”.

Here, it is vital not to conflate the goals of the proposed directive itself and those further goals that a Member State’s own renewables policy might seek to pursue. As the Commission has pointed out in its recent clarifications to the Council on the subject:

“Member States that prefer to use feed-in tariffs can prohibit the transfer of GOs to other Member States. It is recalled that feed-in tariffs allow giving differentiated rewards to different renewables technologies, which the GO system cannot (because GOs will have a converging trading price). This key benefit of feed-in systems is the main reason why GOs can be traded freely only provided the Member State agrees”⁴⁶.

But this explanation is immediately followed by the subsequent clarification given by the Commission to the Council:

“Member States can limit (further) the transfer of GOs at any time during the application of the Directive subject to the conditions in Article 9, as long as existing long-term contracts are respected. The conditions in Article 9 would preclude a prohibition on GO transfers for only one specific year.”

The first explanation clearly admits that GO can only rely upon a trading price, which would mean a uniform price, depending upon the marginal costs of the last, most expensive kWh of RES energy that is needed for target achievement⁴⁷. It also clearly demonstrates that the Commission appreciates the significance of leaving open to the Member State the possibility of providing differentiated levels of support for different renewables technologies. This is also an indication that it seems possible for a Member State to implement and retain a *justifiable national* environmental objective⁴⁸ which goes beyond those envisaged by the proposed directive and could thus be relied upon to justify a prior authorisation system (which otherwise would amount to a breach of Article 28 EC).

The second explanation given by the European Commission underlines the limitation of transfer of GO during the application of the Directive. The approach taken by the Commission in its further explanations to the Council of the proposed directive, while providing some clarification, do not establish absolute clarity in how best to interpret the proposal as it stands, and its implications.

⁴⁵ Although we should note the concern raised by some critics that it should no longer apply so flexibly to such national feed-in systems now that the “current state of Community law concerning the electricity market” has developed significantly, in the light of the legislative package of 2003 on the internal market in electricity and natural gas, and subsequent measures. Against this, it might be argued that the combination of earlier flexible case law on environmental protection, allied with the obligation in Article 6 EC to integrate environmental policy into other areas of activity under the EC Treaty and the advent of the Renewables Dir. 2001/77/EC might suggest that the Court is likely to continue to adopt a relatively non-intrusive position with regard to the justifiability of such national feed-in systems.

⁴⁶ Commission (2008), p. 5, para. II.3.

⁴⁷ See also German Government (2008).

⁴⁸ I.e. measures to achieve the goal of offering differentiated levels of support to secure the development of a portfolio of renewables technologies.

It could mean that any exclusion of a part of the Directive can only be justified for one specific year and only be limited at all if the exemption conditions of the Directive itself are met and even then only “as long as” long-term contracts would not be endangered by the exclusion⁴⁹, following the general legal principle of restrictively interpreting exemptions from general principles (*singularia non sunt extendenda*). This leads back both to the overall point that the scope for exemptions from free trade is generally rather limited and to Article 9(2) of the proposed Directive⁵⁰. On this interpretation⁵¹, the explanation of the Commission would leave the national legislator greatly constrained, and perhaps even empty-handed, in pursuing national support measures such as FiTs.

It becomes clear that the Commission considers that a Member State decision to prevent the free trade in GOs by private parties would only be accepted as a justifiable restriction upon trade in certain circumstances: the criteria in Article 9(2) would have to be satisfied and such a restriction would have to be one which was both necessary and proportionate to the achievement of that environmental goal, and one which would not (without specific and convincing evidence to the contrary) amount to “a means of arbitrary discrimination” (Article 9(2), 3rd sentence, of the proposed directive). A similarly structured analysis would have to be employed in testing the justifiability of restrictive national measures relying upon, for example, security of supply grounds.

Table 1 Justifying the restriction of transfers of GOs

Provision of proposed directive	Grounds for MS choosing to restrict GO transfers by private parties	GO transfers	GO transfers
		<i>out of MS</i>	<i>into MS</i>
Article 9(2), 1 st sentence	Impairing MS’s ability to secure a balanced and secure energy supply	√	√
Article 9(2), 1 st sentence	Likely to undermine the achievement of the environmental objectives underlying the MS’s support scheme	√	√
Article 9(2), 2 nd sentence	Impairing MS’s ability to comply with its renewables target in Article 3(1) / Part A, Annex I	√	X
Article 9(2), 2 nd sentence	Impairing MS’s ability to ensure that share of energy from renewables is ≥ indicative trajectory in Part B, Annex I	√	X

Source: Author’s summary of provisions of Article 9(2) of the proposed directive

⁴⁹ The point about long-term contracts presumably relates to the situation where a long-term contract for GO transfer has been entered into at a point in time where the relevant Member State *did* permit transfer of GOs, and thus relates to a requirement to respect such acquired contractual rights as a form of ‘property’

⁵⁰ See also Fouquet & Johansson (2008).

⁵¹ E.g. it could be argued that the explanation is not saying that exclusion could only be justified for a ‘specific year’: certainly, the wording of Article 9 itself is by no means so restricted. Nor is it entirely clear that the Commission is correct to say that the Article 9 conditions would not permit a prohibition on GO transfers for only one specific year: again, the wording of Article 9 itself does not suggest that conclusion.

It may be argued, however, that it could prove difficult for Member States to rely upon the derogation provisions under Article 9(2). In general, such exemptions for Member States can only be justified if there is no other tool which would have a lesser impact upon free trade while still achieving the justifiable objective. According to an early Commission Directive on the subject, “the restrictive effect on free movement of goods cannot be disproportionate to the object aimed at” or is not justified “where the same objective can be attained by another means hindering trade as little as possible”⁵².

This has the potential to add a further legal uncertainty for the acceptance of national feed-in systems in the context of GOs under the proposed directive. The proposal no longer explicitly shelters the priority for locked-in national support mechanisms. It can be argued that the currently applicable Dir. 2001/77/EC provides that, for reasons of environmental protection, it is justified to support only domestically generated electricity by national support mechanisms (see the discussion in Section 5, above). The current Commission proposal, however, does not contain a comparable provision. On the contrary, it explicitly establishes trade between persons as a basic principle for Europe-wide support for renewable energies.

Thus, it can be concluded that the operation of Article 9(2) would not give Member States a completely free choice as to whether or not to adopt a prior authorisation system for trade in GOs; at the same time, the exclusionary effects of the proposed directive upon such justificatory arguments must not be overstated.

7. POSSIBLE AMENDMENTS AIMED AT CLARIFYING THE LEGAL IMPLICATIONS AND APPLICATION OF THE PROPOSED DIRECTIVE

From the preceding discussions (Sections 3 to 6), there emerge two potential areas in which the legal certainty of the current proposed directive might give some cause for concern. The first is the extent to which Member States would be free to choose to opt out of *any* transfers of GOs by private parties, and the second relates to the grounds upon which Member States would be allowed to rely for the purpose of justifying the imposition of any restrictions upon trade in GOs – i.e. the justifiable terms and conditions of any prior authorisation system that might be adopted.

7.1 Clarifying the position with regard to Member State rules on GOs transfer

As things stand, under Article 9(1) transfers of GOs between MS governments will become the rule, subject to certain preconditions, and the trade of GOs between persons equally will become the rule according to the Article 9(3) presumption in favour of free transferability. Member State derogations from that presumption of free trade in GOs would rely upon the exemption criteria laid down in Article 9(2), supplemented by the Court’s case law. It is arguable that those criteria do not offer concrete and viable tools, and certainty for Member States seeking to opt out of such a trading mechanism. (See the discussion in para. 7.2, below, for ways of making the operation of such derogations clearer.)

One way of clarifying the position would be to allow Member States to choose whether or not to opt *in* to a system in which GOs would be freely transferable. Depending upon the drafting of Article 9 as a whole, this could mean:

⁵² See e.g. Article 3 of Commission Directive 70/50/EEC of 22 December 1969 based upon the provisions of Article 33(7), on the abolition of measures which have an effect equivalent to quantitative restrictions on imports and are not covered by other provisions adopted in pursuance of the EEC Treaty, OJ 19.1.1970 L13/29.

(a) if a Member State were to choose *not* to allow for GO transferability between private parties, then the presumption in Article 9(3) would not apply: thus, the decision not to allow transfers of GOs in such circumstances would not itself need to be tested against Article 28 EC (*provided that* the provision in the directive which allowed this choice to be made would itself be held compatible with the EC Treaty as not being a disproportionate restriction upon such trade in the circumstances);

(b) if a Member State were to choose to *allow* GO transferability between private parties, then this could mean that the presumption in Article 9(3) *would* apply, and:

(i) no prior authorisation system should be possible (i.e. a choice is made to allow trade and thereafter no restrictions upon it could be imposed by the Member State); *or*

(ii) that free trade could still be subjected to a prior authorisation system, either as currently laid down in Article 9(2) or in a modified/expanded form (again, see the discussion in 3.5.2, below) by that Member State, covering both imports and exports of GOs.

7.2 Clarifying the grounds for justifying restrictions upon trade in GOs

If it is feared that the reliance in the analysis above upon cases such as *PreussenElektra* leaves too much uncertainty for Member State authorities in deciding how (and how far) to restrict free transferability of GOs under Article 9(2), one solution could be to provide a fuller explanation of available justifications for such trade restrictions *in the directive itself*. This could be done by adding a further paragraph to Article 9 of the current proposal, in which the specific reasons which justify resort to a prior authorisation system could be laid down in greater detail. This might be thought to be of particular importance in the case of the criterion concerning the ‘underlying environmental objectives’ of national support schemes which provide for differentiated levels of support at national level for different renewable technologies.

Alternatively, it would be possible to provide in Article 9 of the proposed directive that the grounds for justifying recourse to such prior authorisation could be established by the Commission in secondary legislation, drawn up and approved under the ‘Comitology’ procedure. ‘Comitology’ is an EC decision-making process involving the delegation of power (to adopt decisions and standards, and sometimes to amend legislation) by the Council to the Commission, subject to the approval of a committee composed of Member State representatives. There are now four main forms of Committee procedure: the ‘Advisory’, ‘Management’ and ‘Regulatory’ Committee Procedures and the ‘Regulatory Procedure with Scrutiny’, each of which grants a progressively stronger role to the Committee. The current Comitology Decision is Decision 1999/468/EC⁵³ (as amended by Decision 2006/512/EC⁵⁴). According to the ‘Regulatory Committee Procedure’ (under Article 5 of the Comitology Decision), the Commission submits a draft to the Committee, which adopts an opinion by Qualified Majority Vote (QMV) (a form of vote weighting, under which a certain threshold of votes (representing a particular proportion of the Member States and their populations) must be met).⁵⁵

⁵³ Council Decision, OJ 17.7.1999 L184/23.

⁵⁴ Council Decision, OJ 22.7.2006 L200/11: its principal change to the regime concerned the introduction of a new procedure for the exercising of implementing powers: the “regulatory procedure with scrutiny”. The idea of this new procedure is to place the two branches of the Community legislature on an equal footing, at least in matters subject to the co-decision legislative procedure under Article 251 EC, as regards monitoring how the Commission exercises the implementing powers conferred upon it.

⁵⁵ On QMV, see (e.g.) A. DASHWOOD & A. JOHNSTON, ‘The Institutions of the Enlarged EU under the Regime of the Constitutional Treaty’ (2004) 41 *CMLRev.* 1481, esp. 1493-1500 and 1513-1516.

The measure cannot be adopted unless the Committee gives a positive opinion. If this does not happen, the Council can act by QMV to adopt, or, under one variant, by simple majority to block.

The provision of a more detailed list of justificatory criteria (and indeed the circumstances of their application), whether explicitly in the text of the proposed directive itself or subsequently adopted by the Commission via the Comitology process, could serve to increase the predictability and certainty of the implementation process for Member States and private parties operating under the new regime for the promotion of energy from renewable sources.

Of course, the possibility of some legal challenge, whether to the proposed directive itself (once adopted) or to the implementation and/or application of the measure by any given Member State, cannot be excluded, particularly given that most scenarios look likely to involve some restriction of what would otherwise be free trade in goods. But if care is taken to craft the legal regime laid down by the directive, such risks of subsequent (successful) legal challenge should be minimised.

7.3 An alternative suggestion

Another way to address these concerns would be to acknowledge explicitly that Dir. 2001/77/EC is at current the best common denominator to help the legislator in developing the new proposal. There is a need to ensure, on the one hand, flexibility in relations between Member States, both to enable them to assist each other in reaching the renewables targets and to ensure that national support mechanisms may still be relied upon for the sake of the smooth and rapid deployment of renewable energies.

If one follows this approach, then the following principles should be reiterated and integrated into the new proposal:

- (a) clarify that national support mechanisms are market access enhancing devices in view of the internal energy market which is still distorted by the non-internalisation of externalities;
- (b) provide full freedom of choice for Member States to develop the most suitable and effective national support mechanisms given the current full range of possibilities, from energy taxation to FiT or other systems providing a technology-specific premium.
- (c) clarify that GOs as such are not *per se* tradable green certificates and do not constitute as such a right – and obligation – as a tradable certificate. In order to chance the quality of a GO towards a tradable certificate member state need to authorise this legal transformation into a certificate with a specific sealed deed on this document.
- (d) Security that access to national support mechanisms for imported green electricity is left to the decision of the respective Member State under full liberty and the principle of reciprocity.

The Directive should then better clarify the specific possibilities for cooperation and flexibility between Member States, via different and equally viable approaches: e.g. statistically justified transfer of increased RES share with the effect of counting towards RES targets; via the exchange of GOs, again with the effect of counting towards the RES target; via joint project planning in the relevant other Member State or by opening access to the support mechanism (and thus the RES target balance) for electricity produced in neighbouring Member States but directly fed into the grid of the other Member State providing the support mechanism.

Under these suggestions, the first three paragraphs of Article 9 should thus be amended and, as a result, the following paragraphs of that Article could become obsolete.

8. CONCLUSIONS ON GO TRADING UNDER THE PROPOSED DIRECTIVE

At the moment the instrument of “prior authorisation” is an important component for maintaining investment security based on currently successful national support systems in Europe. However, as discussed above in (Sections 3 to 7), some doubts exist, whether the provisions given in the proposed directive to limit trade at installation level are sufficient and legally robust. Since such uncertainty may delay or prevent investments in renewable capacity, it appears vital to increase the legal robustness, and consequently to assure the practical implementation of, the optional “prior authorisation” provisions.

As the practical implications of international installation-based GO trading are emerging, the number of countries that seem to be interested in linking their support schemes with this approach seems to have declined dramatically. If there is no viable set of countries that would intend to trade using the installation-based approach, then the proposed directive could be simplified and investment stability increased by removing the corresponding provisions from the directive altogether. Alternatively, strategies such as those canvassed above (in Section 7) might serve to improve the legal certainty of the proposal concerning such inter-installation transfers.

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"Flexibility mechanisms between Members States"

by Mario Ragwitz

EXECUTIVE SUMMARY

The European Commission has proposed a new renewable energy Directive, which includes flexibility provisions allowing the cost-effective attainment of the ambitious target for renewable energy of 20% of energy consumption, which has been set for the year 2020. One of the flexibility provisions currently being considered is to allow countries to reach their individual targets by buying their renewable electricity deployment deficit from other countries with a surplus (i.e., with a renewable electricity deployment above their targets). This trade may either take the form of statistical transfer of renewable energy or of an exchange in guarantees of origin (GOs). Guarantees of origin are currently implemented in Member States to fulfil the Renewable Electricity Directive requirement that each country have a system that allows the tracing of the source of each kWh of renewable electricity and informs on this source. Trade of GOs may generally take place at the government level or at the company level. This paper analyses the advantages and drawbacks of a system of government trading of GOs with respect to company-trading. It first introduces the key motivations for establishing flexibility instruments. In a next step the advantages and drawbacks of the main options for achieving flexibility are shown. It then presents memorandums of understanding as an important basis for government trade before some main design elements of government trade are introduced. Finally a penalty mechanism in the RES Directive is presented as a possible basis for price determination between governments.

Note: please note that the current briefing paper builds on the elements addressed in a previous briefing drafted in the context of a first workshop on Renewable Energy Sources held in the European Parliament on 13 March 2008 ("RES Potentials and targets, new flexibility systems & efficient instruments" PE 404.897 IP/A/ITRE/WS/2008-02). For this reason, elements of chapter 1 of the current note are identical to elements of chapter 2 of the previous note in order to re-introduce the subject to the reader and improve the basis for comprehension.

1. FLEXIBILITY OPTIONS FOR RENEWABLE ENERGY SOURCES IN EUROPE

The European Commission presented the proposal of a new EU directive for renewable energies (RE) that sets binding targets for all EU Member States (MS) to reach the overall target of 20% renewable energy share in EU energy consumption by 2020, as agreed upon by the European Council in March 2007. The target sharing between MS is not based on RE potential, but on a flat rate increase per MS, adapted to the country specific GDP. Against the background of this target sharing approach, several MS call for the introduction of a flexible mechanism that allows MS with low or expensive RE potential to partly fulfil their RE target in other countries with higher RE potential and lower production costs. In addition, such a flexibility mechanism could facilitate the development of additional RE potentials in countries with relatively low RE targets in relation to their national potentials.

In principle, the proposed directive would allow for two approaches, aiming simultaneously to achieve both of the objectives (efficient use of resources and fair burden-sharing). It is intended that Member States can:

- (c) trade their surplus or deficit of renewable generation at a government level. This option allows as a sub-case clustering of countries based on a common feed-in scheme or a common quota system; *and/or*
- (d) give market participants the flexibility to trade guarantees of origin in other Member States (and it is made explicit that trade in GOs may take place independently of physical trade in the electricity generated).

This chapter is structured in the following manner. First the key motivations for increasing flexibility between Member States are discussed. Next the potential drawbacks of a uniform certificate market for private market participants are discussed. Advantages and disadvantages of the different options for flexibility shall be examined in the third part. Finally the option of trade at a government level will be further elaborated as important implementation details for this alternative are left open by the Directive and still under discussion.

1.1 Motivation of flexibility - optimised resource allocation

The key motivation for increased flexibility in reaching the MS targets is based on the fact that the targets are not set according to an optimised resource allocation in Europe but based on a flat-rate, GDP modulated approach.

In the *(Annex to the) Impact Assessment (IA) of the new RES directive*⁵⁶ options of and benefits arising from a European wide GO trading scheme are prominently discussed. This also includes a quantitative estimation of the benefits arising from the proposed trading system.

*“Introducing RES trading and achieving the RES target again cost efficiently would reduce the costs in the overall energy system by up to 8 billion € by 2020.”*⁵⁷

⁵⁶ European Commission, 2008: Commission Staff working document – Annex to the Impact Assessment (provisional) referring to the package of implementation relating to the EU's objectives on climate change and renewable energy for 2020, comprising also the Proposal for a Directive of the European Parliament and of the Council on the promotion of use of renewable energy sources {COM(2008) X final} {SEC(2008) XX}.

⁵⁷ See page 160 in Commission Staff working document – Annex to the Impact Assessment (provisional) (European Commission, 2008).

Thereby, as stated in a footnote this quantification results from PRIMES scenarios assuming full trade, which represents an overestimation with respect to the proposed regime.

The IA also gives explanation on the derivation of these benefits.⁵⁸

“Under the "potential" option, it is assumed that the 20% renewable energy target will be fulfilled in an economic efficient manner considering resource availability wherever these occur in the EU. Thus, the scenario developed for the "potential" option estimates how the 20% target could be achieved in a low cost manner considering technology diversity and dynamic context.

The flat rate/GDP option deviates from this principle. It follows that the cost of the policy will rise and that on this criterion, the "potential" option ranks more highly.

In terms of costs, it is unsurprising that the move from an economic allocation based on resource potential to a flat rate allocation should generate additional costs. In the simulation used in this impact assessment this cost difference was estimated by comparing the total cost of policy implementation under the two scenarios. ... the costs of achieving the RES targets exactly in the individual MS could amount to up to an extra annual €8bn by 2020.

Such costs would be diminished by increased trade, facilitated by the creation of virtually transferable guarantees of origin ..., allowing Member States to meet their targets not only through national production but also by buying cheaper production elsewhere.”

Let us have a closer look on how this figure of benefits in size of 8 billion € by 2020 was derived: Large-scale energy models such as PRIMES provide a comprehensive depiction of the whole energy sector within each EU MS. However, this broader picture allows to incorporate fewer details with regard to individual submarkets as e.g. those of an artificial RES market. The cost saving expressed in the IA possibly arise from a simplified comparison of a uniform EU-wide RES trading scheme with national RES trading systems. Thereby, it appears straightforward that high benefits would occur as in both schemes a technology-neutral support for RES would be preconditioned where support costs arise from the price as set by the marginal RES option. However, the actual situation appears much more complex as most European countries apply technology-specific RES support by means of feed-in tariffs or premium systems. Within such schemes typically highly differentiated support prices are defined in line with the national RE technology peculiarities. Consequently, the consumer expenditures (policy cost) arise from the comparison of the technology-specific deployment and corresponding support – which are in case of ambitious exploitation paths far below those arising from a simplified marginal pricing scheme. Therefore the magnitude of the impact of flexibility on the total generation costs might however be significantly lower than 8 billion €.⁵⁹

A key question is whether the efficiency gains achieved through flexibility result into a reduction of policy costs (transfer payments) to be paid by the European costumers. The answer to this question strongly depends on the design of the flexibility option introduced. In particular a uniform trading system between market participants would result in a significant producer rents (windfall profits), which may lead to a very strong increase of policy costs.

⁵⁸ See page 85 in Commission Staff working document – Annex to the Impact Assessment (provisional) (European Commission, 2008).

⁵⁹ As recent modelling exams conducted with the Green-X model indicate, a uniform EU-wide market might lead to reduced generation cost in range of 2 to 3 billion € by 2020 compared to pure national solutions.

1.2 Different flexibility options - advantages and disadvantages

Different options to provide for flexibility for reaching the 2020 renewables targets exist. Based on the elaboration of the two previous sections the aim of reaching flexibility should be to create efficiency gains based on an optimal resource allocation but to avoid a significant increase of policy costs due to high windfall profits at the same time. Further criteria for preferable flexibility instruments between Member States are the following:

- Current national support schemes should not be negatively affected and can be tailored to meet the national RES-E policy objectives, e.g. the support of both low-cost and innovative technologies.
- The flexibility mechanism should not increase the risk for investors by creating insecurities with respect to renewables prices.
- Grid integration and secondary support costs can be reflected in the flexibility mechanism.

Three different flexibility mechanisms will be briefly described in the following and evaluated with respect to advantages and drawbacks:

- Transfer of renewable generation at Member State level, involving bilateral or multilateral cooperation between Member States
- A common premium or feed-in system between a group of Member States
- Trade of renewable energy certificates between private market participants.

1. Transfer of renewable generation at Member State level

From a MS perspective, the simplest mechanism to allow flexibility of RE target achievement, and at the same time maintain control of a MS's own target achievement, is the transfer on the government level, as foreseen in article 9(1) of the Directive proposal. To ensure that Member States do not sell their own renewable value while failing to deliver against their domestic target, an indicative trajectory has been defined. Member States would only be able to sell guarantees of origin (GOs) submitted for cancellation within its jurisdiction to another Member State if the selling Member State had met or exceeded the interim targets of its indicative trajectory in the immediately preceding two-year period (Article 9(1)).⁶⁰ This proposed article seems to provide a useful incentive for European co-operation. A Member State which wants to buy GOs from another Member State is likely to provide ongoing technical and other support to ensure that the selling Member State delivers its domestic objective and produces guarantees of origin which can be exported.

Under a MS trade regime, the state itself is in charge of trading. Such exchange may be based on the transfer of guarantees of origin (GO) as proposed by the European Commission or simply by exchange on the basis of the energy statistics. All renewable generation installed after the starting year of trade (e.g. 2010) are allowed for trade.

⁶⁰ It might be argued that this article leaves open the question whether a MS has to exceed its trajectory only once (e.g. in 2011) and can then trade until 2020 or whether it has to be above the trajectory all the time. However, it seems likelier that it relates to *any* "immediately preceding two-year period" in which the Member State's share has been greater than or equal to its indicative trajectory. I.e., that position *vis-à-vis* the trajectory must be established for the relevant preceding two-year period every time any such transfer is attempted by the exporting MS. See, further, the Commission's explanations (Council – Note from the General Secretariat (7263/08), 11 March 2008, p. 4, para. II.3) concerning the timing in this regard (no inter-government trading until post-2013. to allow for the two-year period to be assessed).

The trading responsibility can be commissioned to accredited agents, e.g. the support scheme operator, the TSO, or - for GO purchase within a quota system - the quota obliged parties. The producers of RES-E do not directly sell their production to another country for target compliance. They are solely supported by the domestic support scheme.

If a MS exceeds its interim target, it can sell the surplus GOs of the interim period to other Member States. The revenues of the GO sale should be fed back into the domestic RES support (in the case of FIT systems into the FIT scheme, in the case of quota systems in other measures to promote renewables). This would alleviate the financial burden for the consumers who paid for the RES-E support. An additional incentive for target achievement could be the rule that MS that did not fulfil their interim targets are not allowed to sell GOs to other countries. If meaningful penalties are applied, this rule might not be necessary.

Advantages of MS trade:

- The exporting MS maintains control of its target achievement.
- The national support schemes are not directly affected by trade and can be tailored to meet the national RES-E policy objectives, e.g. the support of both low-cost and innovative technologies.
- The MS that sells the GOs can recover costs for supporting the production of the GOs; it may also make a profit.
- No technology specific regulation is needed: the MS sells the technology mix it produced.
- Large windfall profits (as expected in a technology-neutral private GO trade scheme or in a speculative market), which lead to high costs to consumers will be avoided.
- Grid integration and secondary support costs can be reflected in the GO price.
- GOs can be traded on an annual basis as there is no linkage to support systems with their fixed support periods.
- MS trade does not increase the risk for investors by creating insecurities with respect to renewables prices.

Disadvantages of MS trade:

- The development of additional RE potentials in MS depends solely on the national support scheme in place. Consequently, in countries offering low support, RE potentials would remain untapped. Therefore it is in the responsibility of the governments to create the conditions for a surplus of renewable generation.

2. A common premium or feed-in system between a group of Member States

A possible variant of the transfer between governments is a clustering of RES support for countries using feed-in premium systems for supporting RES electricity.

The key motivation for this option is based on the fact that it allows for joint target fulfilment among participating EU countries and promises a high level of political acceptability at the same time. The potentially large acceptance of this approach follows from the fact that it allows for a clear and transparent framework based on an ex-ante definition, which regulates the sharing of additional cost for RES between potential buyer and seller countries. This fact may be different for an ex-post trading of surplus generation between countries.

In addition to the provisions provided by the Directive under article 9(1), which regulates the transfer between Member States, the possibility of a joint target fulfillment may need to be explicitly implemented in the Directive. A joint target fulfillment shall mean that a group of MSs agrees to achieve the aggregated target of the individual MSs. This may be based on a common action plan, which would be presented to the EC since the common support system would most probably be limited to electricity (and possibly large scale heating). Such action plan contains sector targets for electricity, heat and biofuels and has to be notified to the EC by 31/3/2010. This would mean that MSs present a common target for renewable electricity, if no harmonisation of policies for RES heating and biofuels is intended. Alternatively MSs may establish a multilateral agreement with no involvement of the European Commission. For proving the national target achievement GOs would be exchanged between MSs. However, according to the present Directive proposal such an exchange of GOs is only possible after the participating MSs have reached their national interim targets, which may cause a crucial barrier for the introduction of such a system.

In such a system the group of participating countries would fulfil the target of additional renewable energy (electricity) share in final energy consumption mutually. For sharing the resulting transfer cost due to RES support between the countries an agreement on a clear and transparent methodology is needed which should, in principle, reflect the share of national and international benefits caused by additional RES deployment. The different approaches and possible consequences are discussed in Resch (2008).

In general, harmonisation between participating countries should take place with respect to key parameters of the support system such as duration of support, the periods for the revision of the system and the list of technologies included in the scheme. Depending on the detailed design of the system as discussed in the following section other parameters would not necessarily be harmonised. In particular the level of the premium paid under a harmonised premium system may be fully nationally defined, partially harmonised or fully harmonised within the cluster of countries.

Advantages of a common premium or feed-in system:

- Generally all advantages of MS trade apply in this case as well.
- A common premium gives the further advantage of inherently giving the right signals for a least cost resource allocation of renewable resources among the participating countries.

Disadvantages of a common premium or feed-in system:

- It can be administratively complex to build a common premium or feed-in system between several countries as this for example requires the mutual agreements on tariffs and other key parameters by several countries (and their parliaments).

3. Trade of renewable energy certificates between private market participants

Besides the transfer at government level the Directive proposal introduces GO trade between persons in different Member States based on article (9.3). This means that a RES producer that has not already received financial support by a support scheme can sell the GOs of its RES production to any other person, e.g. a trader, a quota obliged party or an accredited agent of a Member State. The GOs counts towards the target of the Member State to whose designated body the GO is submitted (unless the MS chooses to sell the submitted GOs to another MS).

Alternative to such direct GO sales, the RES producer can choose to profit from the support scheme of another MS (article 8.1 (a) and (b)). In this case all future RES production of that RES plant has to be supported under the chosen support scheme (article 8.2). The GOs are counted towards the target of the MS that provides the financial support.

Member States may introduce a system of prior authorization to control private GO trade, if the trading scheme is likely to impair their security of supply, the environmental objectives of their support scheme or the ability to comply with their national RES targets (article 9.2). The European Commission claims that MS will be able to block trade completely (COM 2008b), but several authors, e.g. Neuhoff et al. (2008) elaborate that, due the way the proposed Directive is formulated, such trade restrictions could only apply in exceptional cases and would not provide a means to effectively restrict or abolish trade.

Advantages of a trade of certificates between private market participants:

- A trade of certificates between private market participants ensures a least cost resource allocation of renewable resources among the participating countries.

Disadvantages of a trade of certificates between private market participants arise in particular if GO trade between private parties cannot be effectively controlled by the Member States (see Klessmann et al. (2007)):

- It leads to very high producer rents for producers of low cost technologies. If the trade between private market participants results in a uniform European certificate market total windfall profits could amount up to 30 bn. € per year in 2020.
- Member States could not prevent the export of low-cost RES-E production. Exports would be driven by RES-E producers thriving to maximize their profit. Thus all new RES-E generated in Europe would be affected by the European GO price. The export volumes would be defined by the GO price, not the government.
- Member States with feed-in systems could not prevent the import of high-cost RES-E production. If Member States with feed-in schemes would have to open their support scheme for imported RES-E, this would considerably increase the costs for consumers.
- Efficient feed-in systems would be destabilized and most likely harmonised with the European GO trading system. In particular feed-in systems would be destabilized by uncontrolled exports and imports: the overall support costs required to comply with a country's target would rise. This would endanger the political acceptance of the support system. In consequence, pressure for a "hidden" harmonisation with the European GO trading system would arise: Member States would tend to abandon their feed-in systems, or to adapt the framework conditions of the systems to GO trade
- A technology-neutral European wide GO trading scheme would increase the overall policy costs to be paid by European consumers to achieve the European 2020 targets.

2. DESIGN ELEMENTS OF GOVERNMENT TRADE

In this chapter we would like to introduce some of the key design elements of government trade. First we would like to explain why a memorandum of understanding can be a useful basis to establish government trade. Then we will briefly introduce some key design elements of government trade. In a last step we argue, why a penalty mechanism in the RES Directive could be a useful tool to determine the price of the exchange between governments.

2.1 Memorandum of understanding as a basis for government trade

In order to facilitate flexibility between Member States government legal agreements or memorandums of understanding could be an important basis. The agreements would in particular define the amount of renewable electricity to be transferred, the price which should be paid by the importing country as well as the time frame for which such transfer would take place. Therefore memorandums of understanding would provide the benefit to create long term guarantees regarding prices and quantities to be transferred between countries. Furthermore such agreements could enable cooperation across different levels (national government, regulator, regions, TSO). Such memorandums of understanding would provide the conditions for a serious cooperation between governments in order to remove barriers to the large-scale use of renewables, for example in grid access design, congestion management, balancing markets, planning regimes and administrative processes.

The bilateral agreements may also include the option of project based investments similar to flexible instruments under the Kyoto protocol. Under the project-based investment mechanism, a MS that is not able or willing to fulfil its RE target solely on a domestic basis would be allowed to financially support RE plants in another country and receive GOs in exchange for target compliance (the same basic mechanism as currently discussed for harmonized GO trade between private actors). Such project-based investments could offer the possibility to access additional RE potentials in countries not interested (and not obliged) to develop these potentials themselves, e.g. - as often argued - some New Member States.

2.2 Some key design elements of government trade

As some very basic elements the questions of the possible time frames for government trade are discussed as well as the number of Member States entering an agreement.

Time frame for trading

Generally agreements between governments can be established for the lifetime of the plant, the entire time frame of the Directive or only for short time frames.

The short-term agreements are more flexible and could thus play some role in responding to new information about technology performance or may leave the option of receiving "cheaper" offers from other Member States.

However, there are several reasons that suggest that the basic agreements might cover longer time frames. A long time frame for transfer agreements provides more visibility for national support schemes and thus increases investment security, particularly during the different stages of project development.

Probably the most important reason for long-term agreements is that they provide the basis for national governments to develop and implement the complementing measures including the transmission expansion, planning regime, appropriate market design and regulation.

In addition a long-term agreement provides a stable framework to enable and develop institutional cooperation between governments, regulation and network operators.

Bilateral versus multilateral pairing

The first question that arises for any system of transfers between member states is whether this will involve bilateral agreements between pairs of member states or whether a group of countries agrees on such transfers.

The advantage of bilateral agreements is that they allocate clear responsibility between both parties and thus also create the full motivation to support the cooperation. As deployment of large shares of renewables will involve significant investment and changes, e.g. to grid infrastructure and operation, such close cooperation can facilitate the cooperation and sharing of experiences among ministry, regulator, regional/town level administration, network operators.

A scheme with many partners might be seen as an option to allow for risk sharing. A country importing certificates of origins from many countries faces smaller risks from non-delivery by one of the partner countries. Where this non-compliance is caused by unexpected technical difficulties (e.g. a technology does not deliver the expected performance), this could however also be considered during the compliance evaluation (e.g. the current Directive already allows for delayed delivery where large scale renewable projects are delayed). In contrast, where failure of national governments to implement the necessary support scheme and administrative and institutional framework, this very risk of non-delivery is the motivation to pursue the necessary policies, and should thus be retained.

Thus we think that bilateral agreements on the transfer of GOs might be preferable.

2.3 A penalty in the RES Directive as a tool for price determination

The Directive currently does not envisage strong compliance mechanisms for member states to deliver their national targets. Where a country misses its target it is in principle not subject to a penalty payment, but only required to submit a revised national action plan. Thus it is mainly a naming and shaming approach.

If member states, the European Parliament or the Commission aims to increase this stringency, to increase likelihood of delivery against the Directive and credibility of the targets so as to attract the necessary volume of private sector investment in technologies and projects, then various options are available.

For different reasons the introduction of a penalty for non-compliance of a Member State should be considered. First this would underline the mandatory character of the agreed targets. Secondly it could act as a kind of safety valve for countries that consider it very difficult to reach their targets domestically (some countries with low potentials fear that photovoltaic could remain as the only option for target compliance in 2020 if most countries are underperforming). The level of the penalty should be based on the expected price of the marginal technology needed to realise the overall 20% target in Europe. Additional costs like grid integration costs should be taken into account. An indicative range for the level of the penalty could be 70-90 €/MWh. In order to stimulate at the same time the creation of a surplus of RES generation the income from the penalty payments could be (partially) used to pay a bonus to those countries, which over-comply w.r.t. their national targets. The level of the bonus should be lower than the penalty level, e.g. it could be set at half the level of the penalty.

The penalty on the one side and the bonus on the other side could represent a very good frame for government agreements as discussed in this paper. Instead of paying a penalty countries, with a potential deficit in terms of the target compliance would have a strong incentive to negotiate a government agreement with countries with a surplus at a price below the penalty level. On the other hand countries with a potential surplus would as well have such incentive in order to reach a price above the level of the bonus. Therefore it would be rather likely that no penalties and bonus payments to a European institution would actually occur but all deficits and surplus would be transferred directly between the Member States.

In case that member states use the option for penalty payments to the European Commission there could be an accumulation of money at the central account. If the income from the penalty payments is larger than the total volume of the bonus payments the European Commission may launch tenders for additional RES infrastructure with a European dimension, e.g. a grid for large wind-offshore or solar thermal electricity projects or financial support for new geothermal electricity projects based on hot dry rock technology.

3. CONCLUSIONS

Exchange of renewable generation at the government level seems to be the preferable option to introduce flexibility for target achievement in the renewable energy Directive. Government agreements can be a useful tool to assist the implementation of MS trade as foreseen in Art.9.1 of the Directive proposal. They can create long term security on quantities and prices for importing and exporting countries. Furthermore such agreements will lead to better compliance properties as additional measures for institutional cooperation between participating Member States may be included. Regarding the time frame for pairing long term commitments aligning to the entire period of the Directive seem to be preferable over short time frames. Furthermore bilateral agreements show some advantages over multilateral agreements. Regarding the price determination for government trade one can generally assume negotiated prices between participating governments or regulated prices, where an EU institution would serve as regulator.

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"Reduction of red tape and streamlining of authorisation in the field of renewable energy sources investments "

by Kai Wegrich

1. INTRODUCTION

(1) This paper comments on the proposal for a Directive on the use of renewable energy as far as suggestions for 'reduction of red tape', and in particular streamlining of authorisation procedures, are concerned. The comments directly refer to the measures suggested in the draft Directive, which, in turn, are based on the findings of the stakeholder consultations and the impact assessment to the proposal.

(2) The paper is based on the analysis of the before mentioned material and academic and applied research on public sector reforms aiming at reducing administrative burden of regulations and speeding up administrative procedures. The existing research, some of it conducted by the author, mainly focuses on the national (or regional and local) level and does not systematically reflect the role of the European Union in cutting red tape. One of the issues to address therefore is the question of whether national experiences can be transferred to the EU level.

(3) The paper proceeds in three main steps. The next section presents crucial research findings concerning the types of 'administrative barriers' that are regarded as 'red tape' and the available 'tool-box' to reduce administrative burdens. Next, the major suggested measures for red tape reduction in the proposal Directive are assessed and scored according to their likely impact (high, medium, low). The final section derives recommendations from the scoring exercise as well as from national and more recent EU level experiences with cutting red tape initiatives.

2. BARRIERS AND SIMPLIFICATION

(4) The notions of 'red tape' and 'administrative barriers' are often regarded as self-explanatory, but for developing targeted simplification or reduction measures, an understanding of different types of barriers, their impact and underlying mechanisms, is crucial. This section briefly outlines recurring types of 'administrative barriers' or 'burden', defines driving forces leading to administrative burdens and links approaches to simplification of these driving forces.

(5) Four types of administrative or regulatory burdens can be distinguished:

- **Costs** of regulations, including
 - Direct financial costs (fees, taxes)
 - Compliance costs of regulations (investments etc.)
 - Costs for complying with information obligations (time needed to fulfil requirements)
- **Time** of approval procedures
- **Opportunity** costs for dealing with administrative procedures
- **Uncertainty** of the outcome of approval procedures with implications for planning of investment decisions etc.

Any attempt to reduce barriers has to take into account that trade-offs might exist between different types of barriers, in particular costs and time on the one hand and uncertainty on the other hand.

(6) Which drivers ‘produce’ these barriers? Public management research has distinguished five core underlying drivers leading to administrative barriers. While these drivers are not mutually exclusive and usually one regulation is a manifestation of the combined effects of these drivers, each of them is supposed to serve a specific purpose. The assumption is that administrative barriers usually do not exist only due to failure of politicians or administrators to design ‘smart regulations’ and lean administrative procedures. Rather ‘bureaucratic regulations’ are usually born out of good intentions, and it is either the combined effect of different regulations or the ‘maximization’ of specific goals that leads to ‘too much’ regulation and bureaucracy, i.e. red tape. The five sources of administrative barriers are outlined in the table below. The table defines the type of barrier, highlights the underlying rationale (or motivation for the creation of such barriers) and provides examples from the field of renewable energy.

Table 1: Drivers of administrative barriers

	‘Political regulation’	‘Administrative regulation’	‘Organisational Bureaucracy’	‘Inter-Organisational Bureaucracy’
Type	Regulatory standards (i.e. emission standards, health and safety standards etc.)	Administrative standards (information obligations)	Bureaucratic behavior (of agency officials)	Bureaucratic procedures
Rationale	Politically set level of protection of society from external effects of market or social activity	Information basis for administrative and political decisions; avoiding fraud and error in decision making	Unified (not arbitrary) application of law Accountable and verifiable decisions making	Coordination requirements follows from functional and regional specialization of agencies. Subject expertise and professionalism as underlying rationale or specialization
Bureaucratic burden	Too high standards Cumulative effect of different standards for an individual company	Administrative burden of providing information in approval procedures (classic red tape)	Limited responsiveness to individual needs and interests	Time consuming procedures, conflicts between agencies, contradictory advises and decisions
Example: renewable energy	Nature conservation, Land use planning, noise standards (windpower)	Technical expertise, engineering opinions (as part of the applications for approval)	Expertise, size and scope of agencies	Multiple agencies involved in approval procedures

(7) Approaches to reducing administrative barriers address these drivers. However, these approaches all have inherent limitations or their adoption will raise opposition from the guardians of these rationales. **Political deregulation** is supposed to tackle regulatory standards; the problem here will be political opposition from the guardians of these political regulations, i.e. individual sectors (nature conservation, local planning) or regions. Political deregulation has to deal with the political demand in favour of regulations that impose regulatory standards. **Administrative deregulation**, i.e. reducing administrative standards (information obligations), will face resistance from agencies that demand these administrative regulations as a basis for sound decision making. The current development in a range of EU member states as well as within the EU Commission is to use a measurement tool – the so called Standard Cost Model – to quantify the amount of administrative burdens of individual regulations. These data are then used as a baseline against which simplification measures are assessed against a reduction target.

(8) The main challenge of **improving agency performance** and mitigate overtly bureaucratic behaviour, i.e. by raising qualification and professionalism of staff, is less direct opposition rather than the ambitious and more long-term nature of such change processes that are also resource intensive. A high level of expertise and specialisation ‘in house’ is needed to develop ‘client responsive’ agencies. However, too much specialisation could impact on the inter-agency coordination. Streamlining administrative procedures or integrating them into ‘one-stop shops’ are among the most important approaches to **improving inter-agency coordination**. The main problem, already mentioned, to this approach is the limits to integration of different tasks and services of individual agencies that all need a high level of domain specific expertise.

(9) All approaches but political deregulation require substantial changes in administrative procedures and the technical and sometimes physical set up of administrative agencies. The notion of ‘simplification measures’ is only an umbrella term for a range of detailed measures, such as introducing ICT in administrative procedures, introducing new channels of internal communication between agencies and facilitate internal coordination through new procedural rules of decision making. What this implies is that reducing administrative barriers is usually not a matter of abolishing a few unnecessary and outdated regulations, but a complex regulatory and organisational change process. And the success of these change processes depends on the quality of implementation management. The core question arising from this is how these processes can be demanded, facilitated and regulated for the field of renewable energy from a European level.

3. ASSESSMENT OF OPTIONS

(10) The proposal for a Directive ‘on the promotion of the use of energy from renewable sources’ includes a range of rather specific approaches to reducing administrative barriers to investments in renewable energy. In article 12 in particular a general principle to regulating investments in renewable energy – establishing the principle of proportional regulation – is formulated and seven specific measures to reduce administrative barriers are listed. The scoring broadly assesses the likely impact of these measures applying the simple scoring scale of high, medium and low. The assessment is based on research on national reforms in the area of speeding up administrative procedures and administrative reforms more widely. The table below highlights what type of instrument the suggested measure represents (using the categories introduced above) as well as the underlying assumption for this choice (how should this instrument work). Next the likely limit or limitation of that approach in the context of EU legislation is shown.

On this basis a score for the likely impact of the measures is assigned. Several notes of caution are in order when interpreting the results of the scoring. First, these are tentative assessments that needed readjustment on the basis of more targeted research in this field. Second, a measure that is limited as an individual tool might develop more impact in conjunction with other instruments – the cumulative effect of these measures cannot be captured by a scoring of individual measures. Finally, minor changes to the design of the measures could substantially change the likely impact of these tools. The scoring is supposed to inform a debate on options for such change.

Table 2: Scoring of the impact of the suggested measures for reducing administrative barriers

Suggestion	Type of Instrument	Assumption	Limit	Impact
Principle: proportionate	Political & administrative deregulation	Acceptance of principles will guide regulatory design	Broad principles are open to various interpretations, no binding effect	Limited
Deadline for approval procedures	Administrative deregulation	Binding deadlines speed up procedures	'gaming' by agencies: last minute information requests to extend time limit	Medium /high
Streamlining procedures & appropriate administrative level	Inter-agency	Changing procedural rules will be followed by change of real world coordination	More a broad goal than a specific instrument	unclear
Rules for authorization	Administrative (de-) regulation	Specification of criteria for authorisation reduces scope for agency to 'bend rules'	Adaptation of rules to 'local' conditions (i.e. local planning, nature conservation etc.) could 'water down' rules	Medium
Clear guidelines for inter-agency coordination	Inter-agency coordination	Guidelines would reduce conflict, facilitate coordination	- No solution to conflict of interest between agencies - Subordinate to 'hard' administrative regulation	Limited
Charges: transparent and cost related	Administrative regulation	Direct limit of costs	Specification dependent on national conditions	High
Burden reduction for smaller projects	Political deregulation	Limiting costs for 'special cases'	Impossible if smaller projects affect other sectors/interests (nature conservation); if not, burdens are lower anyway	Limited
Mediator for conflict resolution	Hybrid of interagency coordination and political regulation	Neutral mediator can resolve conflicts	Unlikely that a mediator will be accepted	unclear

(11) The results of the scoring can be summarised as follows:

- Two instruments are assessed as ‘**high**’, namely deadlines for approval procedures and clear rules for fees and charges.
- One instrument, rules for authorization procedures, is scored as ‘**medium**’
- Two measures, the principle of proportionality and guidelines for interagency coordination, are scored as ‘**limited**’ and
- Two measures – the mediator for conflicts between agencies and firms and the streamlining of procedures – have not been scored, but are assessed as unclear since they are not developed to a level of detail that allows an assessment.

4. CONCLUSION

(12) The recommendation directly following from the scoring exercise is to keep the measures that are scored as high and medium and change or drop those suggestions that are scored as low. The ‘unclear’ proposals should be refined in order to develop tangible objectives related to these measures that can later be evaluated.

(13) While the proposal includes a number of sound suggestions to reduce administrative barriers, some more options should be considered for the Directive. The first option is a **benchmarking approach** in order to monitor the transposition of the Directive at member state level. Comparative data on the time needed for approval procedures as well as the administrative costs for businesses should be gathered in order to develop a sound basis of evidence on which the evaluation of the suggested measures as well as the introduction of others can be decided upon. Concerning the administrative costs, the ongoing process of measuring administrative burden of European law could be taken into account (i.e. using existing data, conducting a measurement for this area). Second, a mechanism of **mutual learning** among member states could be established. While one-stop shops is a wide spread administrative reform approach these days, implementation varies substantially (i.e. service counters only or integrating service delivery) and exchange on ‘good practice’ should be disseminated across member states. A third (and linked) mechanism would be to facilitate member states own efforts to reduce administrative barriers, but establish a mechanisms that requires member states to **report** on the delivery against targets concerning i.e. the speed of administrative procedures or the administrative costs. Considering the application of the Standard Cost Model method in the field of investments in renewable energy is regarded as the most promising option as part of a wider benchmarking approach.