

Brussels, XXX SWD(2014) 140

# COMMISSION STAFF WORKING DOCUMENT EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT

Accompanying the document

**Communication from the Commission** 

Guidelines on State aid for environmental protection and energy for 2014-2020

{C(2014) 2322} {SWD(2014) 139}

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Guidelines on State aid for environmental protection and energy for 2014-2020

### 1. PROBLEM DEFINITION

### 1.1. Context

The EU Treaty states that granting State aid is in principle incompatible with the internal market but provides for some exceptions. The objective of State aid control, which is an exclusive competence of the Commission, is to ensure that government interventions do not unduly distort competition and trade inside the EU. The Commission has adopted horizontal and sectoral Guidelines<sup>1</sup> on the interpretation of Article 107 of the Treaty and more generally of State aid rules. The Environmental Aid Guidelines (EAG) provide criteria to assess whether State aid measures for environmental protection can be declared compatible with the internal market. Member States can also grant environmental aid under the General Block Exemption Regulation (GBER). This Regulation allows Member States to grant aid without the need to notify the measure in advance. The scope of GBER is limited to measures with limited effects on competition. The EAG 2008-2014 will expire by the end of 2014. The main elements taken into account in the review are:

- progress and problems encountered in meeting the 20-20-20 energy and climate targets<sup>2</sup>;
- the shift towards the increased use by Member States of GBER for granting environmental aid as well as the adoption of the Commission's State Aid Modernisation (SAM) strategy<sup>3</sup>.

### 1.2. Problems addressed

The review addresses the following four problems which are largely independent from each other.

1.2.1. State aid rules for support schemes to electricity from renewable energy sources (RES-e) do not prevent cost-inefficiencies and undue market distortions

Most aid granted by Member States between 2008 and 2012 under EAG was to promote electricity from renewable energy sources (around EUR 10 billion). 80% was granted in the form of operating aid. As regards overall electricity generation, the share of RES electricity generation (RES-E) grew from 2008 to 2011 by 5.1 percentage points, reaching a share of 21.8%. Subsidized RES therefore have a significant and further increasing impact on competition in the internal electricity market. The existing EAG rules do not tackle the following two problems of RES support schemes:

- Cost inefficiencies caused by a) administratively set tariffs for the production of electricity, b) the absence of review clauses to account for technology cost reductions over time and c) the absence of competition within and among RES-e technologies,
- Distortion of competition between electricity producers in the internal electricity market due to the introduction of exemptions from balancing responsibilities and the lack of price signals;

<sup>&</sup>lt;sup>1</sup> http://ec.europa.eu/competition/state\_aid/legislation/horizontal.html and http://ec.europa.eu/competition/state\_aid/legislation/specific\_rules.html

<sup>&</sup>lt;sup>2</sup> Impact assessment on energy and climate policy up to 2030, SWD(2014) 15 <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52014SC0015:EN:NOT">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52014SC0015:EN:NOT</a>

<sup>&</sup>lt;sup>3</sup> COM (2012) 209 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52012DC0209:EN:NOT

1.2.2. Financing the support to electricity from renewable energy sources may lead to higher retail energy prices, which may increase pressure on Member States to exempt certain undertakings from the costs of financing renewable energy – Outside the scope of the 2008 EAG

Over the 2008-2011 period, average electricity taxes and levies in the EU have risen by 43% for households and 67% for industrial consumers, whereas the changes in respective average energy prices were 3% and -2% and in network costs 17% and 21%. Taxes and levies therefore accounted for the largest increase in electricity bills. Within this category, the financing of RES support largely explains these increases. On the other hand, the merit order effect of RES (low marginal costs) has contributed to lower the wholesale price of electricity. However, the increase in the costs of RES support generally outweighs these benefits at retail level. Certain energy intensive sectors are very sensitive to electricity price increases. When financing support to RES results in significant price increases, certain industrial sectors may relocate their production. The existing EAG do not however include compatibility criteria on measures aimed at compensating undertakings in risk of relocation from the costs of financing renewable energy policies.

1.2.3. Insufficient level of generation adequacy – Outside the scope of the 2008 EAG

EAG aim to improve the level of environmental protection. As a result EAG have contributed to achieving the 2020 climate and energy targets; in particular through State aid to RES and energy saving measures. The existing EAG do not however consider other policy objectives such as ensuring security of supply.

The Impact Assessment Report for the 2030 energy & climate Framework identified two problems stemming from the integration of energy & climate objectives: insufficient investment in electricity generation and in energy infrastructure. Some of the underlying causes are market failures that could be addressed by State aid measures. In the area of energy infrastructure, the Commission adopted between 2008 and July 2013 15 no objections Decisions under Article 107(3)(c) of the TFEU. The problem of State aid in the field of energy infrastructure is merely an issue of codification; that is transposing the principles established in case practice into compatibility criteria. As for electricity generation adequacy, concerns about lack of capacity have led some Member States to consider public intervention, such as support schemes for investments in new electricity generation capacity or for remunerating existing plants to remain operational. Where such measures constitute State aid, the Commission needs to assess them under State aid control rules. The existing EAG do not include compatibility criteria. On 5 November 2013, the Commission issued a Staff Working Paper setting out guidance on State intervention to ensure generation adequacy.

1.2.4. The scope and criteria in EAG and GBER: Unnecessary ex-ante scrutiny of certain measures with little impact on competition and diverging criteria across State aid rules

The time required for the compatibility assessment of notifiable measures depends on the quality of the Member State's submission and the complexity of the issues at stake. Measures falling under the scope of GBER can be put into effect without an ex-ante assessment by the Commission. However, at present, GBER only covers some of the aid categories addressed under the EAG and does not, for instance, include the possibility to grant operating aid to RES. Moreover, most of the expenditure between 2008 and 2012 was granted under a small

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<sup>&</sup>lt;sup>4</sup> Generation Adequacy in the internal electricity market - guidance on public interventions SWD(2013) 438 http://ec.europa.eu/energy/gas electricity/doc/com 2013 public intervention swd01 en.pdf

number of cases while many cases involved only small aid amounts. This hampers the ability to focus on the most significant cases and may delay unnecessarily putting into effect measures with limited effects on competition. Furthermore the existing EAG diverge from the common assessment principles agreed in the SAM strategy which adds complexity for Member States and beneficiaries.

### 2. ANALYSIS OF SUBSIDIARITY

EU State aid control is the exclusive competence of the Commission according to Articles 107 and 108 TFEU. As a result the Commission has exclusive competence for defining the conditions under which state aid may be considered to be compatible with the internal market. The Commission must assess the compatibility with the internal market of State Aid granted by Member States to promote environmental and energy policies either directly on the basis of Article 107(3)(b) and (c) of the TFEU or on the basis of Guidelines in which the Commission lays down the procedural and substantive rules that it will apply when analysing the positive and negative effects of environmental and energy state aid measures.

#### 3. OBJECTIVES

The identified four problems are largely independent from each other. Next the specific and operational objectives for each of the problems identified.

Problem number	Specific objectives	Operational objectives
1.	Assist achieving the 2020 renewable energy targets while minimising the distortive effects of support schemes.	<ul> <li>Reduce the support per unit of energy produced</li> <li>Increase the volume of renewable electricity participating directly in the market and in balancing markets.</li> </ul>
2.	Minimise distortions to competition and trade resulting from the financing of support schemes to renewable energy sources, while limiting negative impacts on the competitiveness of EU firms.	Reduce the incidence of firms relocating due to competitiveness issues.
3.	Contribute to ensuring the required generation adequacy level of the Union's energy system while minimising competition distortions	Increase reserve capacity margins
4.	<ul> <li>Focus on the measures with the largest potential to cause competition distortions.</li> <li>Streamline, clarify and align the rules with the common assessment principles agreed for all State aid rules.</li> </ul>	<ul> <li>Increase the share of aid granted under GBER at the expense of aid granted under EEAG.</li> <li>Reduce the time required to assess notifications.</li> </ul>

### 4. POLICY OPTIONS

Options have been structured into four policy areas. These policy areas are largely independent from each other.

### 4.1. Support schemes to electricity from renewable energy sources

### 4.1.1. *Maintain the existing criteria (baseline)*

The existing rules establish that operating aid for RES-e can cover the difference between production costs and the market price. This option is the baseline scenario.

# 4.1.2. Introduction of minimum market-response requirements

This option aims at limiting market distortions by introducing two features:

- Obligation on large RES-e installations to sell the electricity on the market. Beneficiaries will therefore receive aid indexed to the market prices. Member States have flexibility for the design of the instrument. This option also allows for corrective measures in administratively established tariffs, such as corridor solutions or automatic digression of aid levels.
- Large RES-e producers are subject to the same balancing responsibilities as other electricity generators long as the market design allows it. Balancing responsibilities means responsibility for deviations from the scheduled generation programme.

### 4.1.3. Introduction of strong competition requirements

This option includes the above minimum market response requirements. The option introduces an additional feature to achieve higher cost efficiency of the support schemes for large installations: not allowing the support to be established administratively. Instead, it proposes granting the support through a genuine competitive bidding process on the basis of clear, transparent and non-discriminatory criteria. Two sub-options are examined with (4.1.3.a) and without (4.1.3.b) flexibility features. The flexibility package allows Member States to opt out from competitive bidding if they demonstrate that it may lead to sub-optimal solutions or hamper the deployment of immature technologies. It also foresees a progressive phase-in from 2014 to 2017.

### 4.2. Exemptions/ reductions from RES financing

### 4.2.1. Do not include compatibility criteria

This is the baseline scenario.

### *4.2.2. Use the approach of the ETS Guidelines*

Acknowledging the carbon leakage risk posed by the RES financing burden on certain EU sectors, this option proposes using the principles established in the ETS Guidelines<sup>5</sup> to assess measures involving exemptions/ reductions from RES financing. That is aid to an electricity-intensive company is deemed necessary if its sector or sub-sector is in the list established in Annex III of the ETS Guidelines. State aid to beneficiaries within these sectors would be deemed compatible if they pay at least 20% of the average RES financing cost per MWh.

# 4.2.3. Use adjusted ETS Guidelines criteria

This option proposes using the principles established in the ETS Guidelines but adopting slightly different criteria to establish the necessity of aid. Under this option, aid to an electricity-intensive sector is deemed necessary when considering its electricity costs<sup>6</sup> as a

<sup>&</sup>lt;sup>5</sup>http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012XC0605(01)&from=EN

<sup>&</sup>lt;sup>6</sup> [Measured using average retail electricity prices paid by industry

share of its Gross Value Added ("electricity-intensity") at an EU level of 10% and trade intensity of 10% at an EU level with third countries<sup>7</sup>. This option also considers sectors at risk as those with 4% trade intensity but electricity-intensity of at least 25% or that are economically similar (e.g. on account of substitutability). Equally, sectors having a slightly lower electricity-intensity (but at least 7%) and facing very high trade exposure (of at least 80%) would face the same risk. State aid to beneficiaries within these sectors would be deemed compatible if they pay at least 20% of the average RES financing cost per MWh.

More than 60 sectors meet these necessity criteria and would therefore be deemed to be exposed to relocation risks. This combination of parameters were chosen as it is broadly analogous to the quantitative criteria used to set the list of sectors deemed to be at risk of carbon leakage in the ETS Guidelines. The sector "Casting of Iron" (NACE code 2451) meets the criteria above. In order not to distort competition between sectors which are economically very similar, three metals casting sectors are added to this option.

# 4.2.4. Use adjusted ETS Guidelines thresholds, with additional company-specific eligibility criteria

This option builds on the option described in option 4.2.3 above, but also allows Member States to exempt an individual company provided it has an electricity-intensity of at least 25% and belongs to a sector with a trade intensity of at least 4% at EU level. This option is proposed as a way of accounting for the fact that certain sectors might be heterogeneous in terms of electricity-intensity.

# 4.2.5. Use adjusted ETS Guidelines criteria, with additional company-specific eligibility criteria, and caps on the amount of surcharges payable by undertakings

This option builds on the option described in sub-section 0 above, but also gives Member States the possibility to further limit the amount of surcharges to be paid at undertaking level at 5% of the gross value added (GVA) of the undertaking concerned. For undertakings having an electricity-intensity of at least 20%, Member States would be able to limit the overall amount to be paid at 2.5% of the GVA of the undertaking concerned. This option is proposed as a way of ensuring that a 20% share of the full surcharge does not go beyond what undertakings particularly affected by the burden can bear, and acts as a backstop against extreme impacts on international competitiveness..

### 4.3. Aid to measures to ensure generation adequacy

### 4.3.1. Do not include compatibility criteria (baseline)

This is the baseline scenario. The compatibility of measures would be assessed directly under the Treaty or possibly under the Services of General Economic Interest (SGEI) rules<sup>8</sup>.

### 4.3.2. Introduce compatibility criteria – minimum competition requirements

This option proposes compatibility criteria while leaving a great margin of appreciation to Member States regarding the design of the appropriate capacity remuneration mechanism.

<sup>&</sup>lt;sup>7</sup> Trade intensity (TI): "the ratio between the total value of exports to third countries plus the value of imports from third countries and the total market size for the Community (annual turnover plus total imports from third countries)". Analytically, TI=(X+M)/(M+Y) where X represents "total value of exports to third countries"; M the "value of imports from third countries" and Y "annual turnover (i.e. GVA)."

<sup>8</sup> http://ec.europa.eu/competition/state\_aid/legislation/sgei.html

This option however proposes demanding necessity criteria and calls for avoiding overcompensation in the proportionality criterion.

# 4.3.3. Introduce compatibility criteria – strong competition requirements

This option proposes developing compatibility rules stemming from the Guidance paper issued by the Commission on 5 November 2013<sup>9</sup>. In particular the option transposes the checklist in the Staff Working Paper into compatibility criteria. In this option, Member States would have to comply with a number of general principles in their design of a measure for addressing their generation adequacy problems in order to avoid market distortions within Member States and across the internal market.

### 4.4. Aligning and streamlining

# 4.4.1. Maintain the scope and compatibility criteria of the Guidelines and GBER

This option is the baseline scenario. It proposes to keep the assessment principles in the Guidelines and scope of GBER unchanged.

4.4.2. Align the existing compatibility criteria of the Guidelines with the common assessment principles in the SAM strategy. Include new categories in the Guidelines on which there is sufficient case practice.

This option proposes several technical adjustments: a) align the current compatibility criteria with the CAPs proposed in the SAM strategy; b) codification of case practice; c) adaptations stemming from sectoral policy updates.

4.4.3. Include in the scope of GBER additional categories concerning investment and operating aid

This option proposes to include in GBER the following categories together with the ex-ante less distortive compatibility criteria in the Guidelines:

- investment aid to remediation of contaminated sites;
- investment aid to energy efficient district heating and cooling including the network;
- operating aid to renewable energy sources, and
- Promotion of energy from renewable sources in small scale installations
- Extension of the possibility to grant aid for early adaptation to future standards to large undertakings (currently only possible for SMEs)

This option also proposes adding "investment aid to energy efficiency projects in buildings" in line with the case practice.

### 5. ASSESSMENT OF IMPACTS AND COMPARISON OF THE OPTIONS

The table below sets out a comparative overview of the assessment of the policy options in each policy area against the relevant specific objectives and impacts. The table below explains the qualitative scale used to weigh the options.

Table of symbols	
Significant negative impacts or costs	

<sup>&</sup>lt;sup>9</sup> Generation Adequacy in the internal electricity market - guidance on public interventions SWD(2013) 438 <a href="http://ec.europa.eu/energy/gas-electricity/doc/com-2013">http://ec.europa.eu/energy/gas-electricity/doc/com-2013</a> public intervention swd01 en.pdf

Minor negative impacts or costs	-
No impact	0
Minor positive impacts or cost savings	+
Significant positive impacts or cost savings	++

# 5.1.1. Options in policy area "support schemes to electricity from renewable energy sources"

Options Objective/Impact	Option 4.1.1 (Baseline)	Option 4.1.2	Option 4.1.3.a	Option 4.1.3.b
<b>Objective:</b> Assist achieving the 2020 renewable energy targets while minimising the distortive effects of support schemes	0	+	++	0
Economic Impacts				
RES-e producers	0	-/0.	0/+.	-/+
Energy users	0	0/+	+	++
Environmental impact	0	0	0	-
Social impacts	0	0	0	-
Impact on Member States	0	0.	0/-	
Administrative burden	0	0/-	0/-	-

Option 4.1.3.a is the preferred option. This option meets best the objective of the review that is, reducing market distortions and improving the cost-efficiency of RES-e support schemes. Energy users will be the stakeholder group benefitting most thanks to the expected cost-savings. The flexibility package in this option will allow reducing possible negative impacts for instance by a progressive phase-in.. In addition Member States will maintain the necessary flexibility with regard to the technology mix called by most respondents in the last public consultation in view of meeting long term goals, such as the 2030 targets.

# 5.1.2. Options in policy area "Exemptions/reductions from RES financing"

Options Objective/Impact	Option 4.2.1 (Baseline)	Option 4.2.2	Option 4.2.3  Use adjusted ETS Guidelin es	Option 4.2.4	Option 4.2.5
<b>Objective:</b> Minimise distortions to competition and trade resulting from the financing of support schemes to renewable energy sources, while limiting negative impacts on the competitiveness of EU firms	0	0/+	+	+/++	++
Economic impact: Impact on industrial competitiveness	0	0/+	+	+/++	++

Options Objective/Impact	Option 4.2.1 (Baseline)	Option 4.2.2	Option 4.2.3  Use adjusted ETS Guidelin es	Option 4.2.4	Option 4.2.5
Economic impacts: impact on competition and trade	0	0		0/-	-
Environmental impact: achieving the RES targets for energy	0	+.			
Impact on Member States	0	(n/a).		(n/a)	(n/a)

Option 4.2.5 is the preferred option. It best meets the objective of minimising distortions to competition and trade resulting from the financing of support schemes to renewable energy sources, while limiting negative impacts on the competitiveness of EU firms. While other options might be slightly less distortionary to competition, the negative impacts on distortion of the preferred option are expected to be limited.

# 5.1.3. Options in policy area "Aid to measures to ensure generation adequacy"

Options Objective/ Impact	Option 4.3.1 Baseline	Option 4.3.2	Option 4.3.3
Objective:Contribute to maintaining the required generation adequacy level of the Union's energy system while minimising competition distortions	0	+	++
Impact on electricity producers (technology mix)	0	+	++.
Impact on internal energy market	0	+	++
Impact on energy users (cost-efficiency)	0	+	++
Environmental Impact	0	0	+
Social Impact	0	0/+	+
Impact on Member States	0	-	-
Administrative burden on undertakings	0	0/-	0/-

Option 4.3.3 is the preferred Option as it addresses best the objective of the review. Even though some stakeholders question whether the generation adequacy problem should be dealt with under State aid rules and whether the rules should not leave more discretion to Member States, this Option has the advantage of setting a clear assessment framework, thus creating more legal certainty for all stakeholders. Option 4.3.3 moreover proposes the most market based solution for the generation adequacy problem, causing the least distortion to the Internal Energy Market and resulting in the highest cost-savings to energy users.

# 5.1.4. Options in policy area "Aligning and streamlining"

Options Objectives/ Impact	Option 4.4.1 (baseline)	Option 4.4.2	Option 4.4.3
Objective 1: Streamline, clarify the rules and align them with the common assessment principles agreed for all State aid rules	0	++	++
<b>Objective 2</b> : Focus on the measures with the largest potential to cause competition distortions.	0	0	++
Economic impact	0	+	++
Environmental/social impact	0	0	+.
Administrative burden: Impact on beneficiaries	0	+	++
Administrative burden: Impact on Member States	0	+/-	++
Administrative burden: Impact on Commission	0	+	++

Option 4.4.3 is the preferred option. It addresses best the objectives of the review. The streamlining of the rules results in simplification and the broader scope of GBER allows Member States to grant aid faster in cases with limited risks of distorting competition. The beneficiaries of aid are those that benefit the most from this option as aid is granted faster. Member States and the Commission also need to allocate fewer resources to the notification and processing of state aid cases

### 6. MONITORING AND EVALUATION

DG COMP will continue its annual monitoring based on a sample of existing aid schemes (covering notified and block-exempted schemes).

The Commission may require Member States to limit the duration of certain notified schemes. Mandatory evaluations will be carried out by independent experts for schemes at risk of restricting competition significantly. These evaluations should be based on a common methodology and their results will be published.

The Commission intends to review the EEAG in the first half of 2017, based on a consultation of Member States, of other interested parties and possibly based on an independent evaluation. It will also conduct an ex-post evaluation of the EEAG, in time for their revision for the period after 2020.