

EN

EN

EN



EUROPEAN COMMISSION

Brussels, xx.xx.xxxxx

**COMMUNICATION FROM THE COMMISSION**

**Guidance document on the optional application of Article 10c of Directive 2003/87/EC**

## COMMUNICATION FROM THE COMMISSION

### Guidance document on the optional application of Article 10c of Directive 2003/87/EC

#### 1. INTRODUCTION

- (1) Article 10c of Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC<sup>1</sup> allows Member States whose electricity systems meet certain criteria to provide for transitional allocation of emission allowances free of charge to installations for electricity production. The criteria relate to the need to modernise the energy system, and Member States deciding to use this option must in parallel undertake action aimed at securing investments in the energy system, such as upgrades of infrastructure, clean technologies etc., of an amount corresponding to the value of the corresponding emission allocations allocated for free.
- (2) It must be stressed that Member States meeting the criteria are not required to use the option, and may well choose not to in the light of the auctioning revenues that they would forego by doing so. However, those who do apply the option must comply with the provisions of Article 10c of Directive 2003/87/EC.
- (3) A harmonised emission trading system is imperative to best exploit the benefits of emission trading and to avoid distortions of competition in the internal market. In this respect, Directive 2003/87/EC establishes auctioning as the basic principle for allocation of emission allowances, as it is the simplest, and generally considered the most economically efficient system. Auctioning also provides a level playing field for competition on the internal electricity market to further develop.
- (4) Furthermore, Directive 2003/87/EC explicitly stipulates that full auctioning should be the rule from 2013 onwards for the power sector, taking into account the sector's ability to pass on the opportunity cost of CO<sub>2</sub> to consumers in electricity pricing and thus to generate additional profits ("windfall profits"). Auctioning will eliminate such windfall profits.
- (5) Article 10c of Directive 2003/87/EC contains provisions derogating from a number of core principles of Directive 2003/87/EC, in particular, the Union-wide fully **harmonised approach towards allocation**, the introduction of **auctioning as the default** allocation method and the **explicit exclusion of free allocation of emission allowances in respect of electricity production**. These principles and rules aim at ensuring the highest possible degree of economic efficiency in the scheme. Accordingly, the implementation of Article 10c should not impair these general rules and objectives of Directive 2003/87/EC.

---

<sup>1</sup> OJ L 275, 25.10.2003, p.32.

- (6) Against this background and also bearing in mind the concerns of many Member States with respect to potential distortions of competition accruing from the application of Article 10c of Directive 2003/87/EC, the Commission considers it necessary to provide guidance on the implementation of Article 10c for the following reasons:
- The Directive requires the Commission to assess individual applications by Member States wishing to apply Article 10c of Directive 2003/87/EC. By adopting this guidance document, the Commission lays down a transparent framework for its assessment.
  - Article 10c of Directive 2003/87/EC represents an exemption from core principles of Directive 2003/87/EC. It must be ensured that this exemption is interpreted and applied in a manner that does not undermine the overall objectives that the Directive sets out.
  - While Article 10c(3) of Directive 2003/87/EC requires the Commission to provide guidance "*to ensure that the allocation methodology avoids undue distortions of competition and minimises negative impacts on the incentives to reduce emissions*" by means of a comitology procedure, other elements related to the allocation methodology, such as the maximum amount of free emission allowances defined by Article 10c(2), also necessitate a common understanding.
  - The scope of Article 10c of Directive 2003/87/EC concerns only the electricity generation sector. For this reason, it is necessary to also achieve a common understanding as to which installations are eligible to transitionally receive free emission allowances under this provision.
  - A number of technical terms introduced by Article 10c of Directive 2003/87/EC (e.g. gross final national consumption, market value of free emission allowances) are not defined in that Directive. In order to ensure consistent application of these provisions across Member States that may apply Article 10c, clear guidance is necessary.
  - Some provisions of Article 10c of Directive 2003/87/EC result in a degree of discretion for Member States in their implementation. This, in particular, applies to each Member State's national plan and the investments related to it. Other provisions introduce new elements to Directive 2003/87/EC that need to be reconciled with the market-based approach of the scheme. The implementation of Article 10c must neither run counter to the objectives of Directive 2003/87/EC, nor jeopardise a level playing field on the Union internal market.

## **2. MAXIMUM NUMBER OF ALLOWANCES TRANSITIONALLY ALLOCATED FOR FREE AT MEMBER STATE LEVEL**

### **2.1. Determination of maximum number**

- (7) Article 10c(2) of Directive 2003/87/EC determines the maximum number of emission allowances allocated for free that may be allocated to eligible installations in eligible Member States in 2013. Pursuant to this provision, this number must decline in subsequent years and result in no free allocation of emission allowances in 2020.

- (8) When assessing an application pursuant to Article 10c(6), the Commission will analyse whether the maximum number of emission allowances made available free of charge under Article 10c of Directive 2003/87/EC in 2013 in a given Member State exceeds the number resulting from the calculation set out in Annex I, which is based on Article 10c(2).

## **2.2. Gradual decrease of free allocation**

- (9) Article 10c(2) of Directive 2003/87/EC clearly stipulates that "the total transitional free allocation ... shall gradually decrease, resulting in no free allocation in 2020." For this reason, a credible and convincing gradual trajectory from the starting point of free allocation of emission allowances in 2013 to the end point of free allocation of emission allowances in 2020 is mandatory.
- (10) In the light of the legal mandate to fully phase out allocation of free emission allowances from a maximum level of 70% to 0% within a maximum of seven years, a credible and convincing gradual trajectory towards no allocation of free emission allowances in 2020 encompasses a clear downwards trend reflected in the interim steps between 70% and 0%.
- (11) When assessing an application submitted pursuant to Article 10c(5) of Directive 2003/87/EC, the Commission will analyse whether Member States pursue a credible and convincing gradual transition to full auctioning. Excessive back-loading of reductions would result in a higher overall number of emission allowances allocated for free over the entire 2013-2020 period, and would consequently have the effect of causing undue distortions of competition in the Union market. This would not be compatible with Article 10c(5) of the Directive. The Commission considers that Member States have some discretion in setting out an appropriate reduction trajectory. The Commission considers that the condition of a gradual decrease would be fulfilled and that competition would not be unduly distorted where a Member State has provided for either a linear reduction trajectory or a non-linear reduction trajectory wherein the decline in emission allowances allocated for free between any two consecutive years in the period from 2013 to 2020 deviates at most 50% from the average annual decline necessary in the remaining years to reach 0% in 2020.

## **3. ELIGIBLE INSTALLATIONS**

### **3.1. Cut-off date**

- (12) In order to be eligible and benefit from the free allocation of emission allowances for electricity production, installations should have been put in operation by 31 December 2008. In their application pursuant to Article 10c(5) of Directive 2003/87/EC, Member States should demonstrate that installations in their respective territory considered to be eligible for transitional free allocation of emission allowances under Article 10c of Directive 2003/87/EC meet this condition by indicating the verified emissions of these installations for the period 2008 – 2010 including the permit number and the account holder of the installation concerned, as registered in the CITL. This information should also serve as proof that the installation is still active and has not closed down its operation in the meantime.

- (13) Alternatively, installations may also be eligible for transitional free allocation of emission allowances under Article 10c of Directive 2003/87/EC if the relevant investment process was "physically initiated" by 31 December 2008.
- (14) This implies that the relevant decisions to build a new power plant should have been taken without being affected by the prospect of receiving free emission allowances for the new plant.
- (15) In the light of the above considerations, an investment process should be considered physically initiated no later than 31 December 2008 if it can be demonstrated that the investment decision was not influenced by the option of receiving free allocation of emission allowances. To this end, Member States could provide substantiated evidence that:
  - Construction work has physically started on-site and was visible by 31 December 2008; or
  - a contract for the construction of the power plant in question was signed before 31 December 2008 between an investor (often the operator of the plant) and a company that is in charge of the construction work.

The Commission understands that, in the given context, construction work that has physically started could also encompass preparatory work for the construction of the power plant in question, but would always be undertaken on the basis of an explicit approval, if necessary, of the relevant national authority. Member States should submit such relevant authorisation document, which should be of substantive legal status issued in accordance with national or Union law. In the absence of a requirement for an explicit approval for preparatory work, other evidence would be necessary to establish that construction work had been physically started.

The above list should not be considered exhaustive, as Member States may have other means to provide documentary evidence that a certain investment decision was not influenced by the option of receiving free allocation of emission allowances.

- (16) When carrying out the assessment pursuant to Article 10c(6) of Directive 2003/87/EC, the Commission will require clear and substantiated evidence that these conditions have been met. In their application pursuant to Article 10c(5) of Directive 2003/87/EC, Member States should submit all relevant information in this respect. Otherwise the Commission will reject the list of installations covered by the application.

### **3.2. Installations for electricity production**

- (17) Pursuant to Article 10c(1) of Directive 2003/87/EC, Member States may transitionally allocate emission allowances for free to installations for electricity production. The phrase "installations for electricity production" is not defined by Directive 2003/87/EC. As an exception from the general rule of Directive 2003/87/EC that no emission allowances should be allocated for free in respect of electricity production, the phrase must be interpreted so as not to impair the objectives of the Directive.

- (18) Such an approach is supported by the need to prevent negative impacts accruing from the implementation of Article 10c of Directive 2003/87/EC from affecting the industrial sector of the Member State concerned and the Union-wide market.
- (19) With a view to defining the scope of the term "installations for electricity production", reference is made to the concept of "electricity generator" defined in Art 3(u) of Directive 2003/87/EC and also referred to in Article 10c(2) of this Directive. In accordance with this concept, all installations producing exclusively electricity and installations producing electricity and heat are covered<sup>2</sup>. However, installations carrying out another activity listed in Annex I of Directive 2003/87/EC in addition to combustion of fuels, i.e. the production of electricity and/or heat, would not be included in this definition.
- (20) In the light of the above considerations, the Commission considers as eligible for free allocation of emission allowances pursuant to Article 10c(1) of Directive 2003/87/EC:
- (a) Installations that qualify as an electricity generator under Article 3(u) of Directive 2003/87/EC and,
  - (b) in the case of installations producing electricity and heat, installations for which only relevant emissions attributable to electricity production are taken into account.
- (21) In its assessment pursuant to Article 10c(6) of Directive 2003/87/EC, the Commission will verify whether evidence necessary to ensure compliance with the above criteria is provided.
- (22) To determine emissions attributable to electricity for installations that produce both electricity and heat, Member States should ensure compatibility with implementing measures pursuant to Article 10a, and in particular 10a(4) of Directive 2003/87/EC and should make reference to the allocation methodology pursuant to Article 10c(3) of Directive 2003/87/EC.

#### **4. REQUIREMENTS FOR THE NATIONAL PLAN**

##### **4.1. Principles for the National Plan**

- (23) Pursuant to Article 10c(1) of Directive 2003/87/EC, the Member States concerned shall submit to the Commission a national plan for investments. The Commission recommends that the national plan should be based on a number of common principles designed to best ensure a fair and consistent implementation of the objectives accruing from Directive 2003/87/EC in general and Article 10c in particular:

---

<sup>2</sup> It is important to stress that also installations which from a purely legal point of view could be considered electricity generators in accordance with Article 3 point u of Directive 2003/87/EC would not be considered eligible for free allocations under Article 10c of Directive 2003/87/EC, if they carry out another industrial activity, even if this industrial activity may not fall under the scope of Annex I of Directive 2003/87/EC, since it may not be listed in this Annex or may not exceed the threshold for the respective industrial activity as laid down in Annex I of Directive 2003/87/EC

*Principle 1:* The national plan should identify investments, which, directly or indirectly (investments in networks and ancillary services), contribute to decreasing greenhouse gas emissions in a cost effective manner.

*Principle 2:* The investments identified in the national plan should be designed to eliminate in the future, to the extent possible the situations referred to in Article 10c(1), letter (a)<sup>3</sup> and (b)<sup>4</sup> and the first condition of (c)<sup>5</sup> of Directive 2003/87/EC.

*Principle 3:* The investments should be compatible with each other and other relevant Union legislation. They must neither reinforce dominant positions nor unduly distort competition and trade in the internal market and, where possible, should strengthen competition on the internal market for electricity.

*Principle 4:* Investments identified in the national plan should be additional to investments Member States must undertake in order to comply with other objectives or legal requirements accruing from Union law. They should also not concern investments, which would be required to match increasing electricity supply and demand.

*Principle 5:* Investments identified in the national plan should contribute to diversification, and reduction in carbon intensity, of the electricity mix and the sources of energy supply for electricity production.

*Principle 6:* Investments should be economically viable in absence of the free allocation of emission allowances under Article 10c of Directive 2003/87/EC, once transitional allocation of such allowances comes to an end, with the exception of specific pre-defined emerging technologies still at the demonstration stage and listed in Annex III.

- (24) The investments identified in the national plan should, to the extent possible, comply with these principles. Where compliance with all principles cannot be ensured for a certain investment, the Member State concerned should provide detailed reasons as to why. In any case, such investments should not run counter to these principles or undermine the underlying objectives. Investments may likewise not undermine objectives laid down in the Treaties or other relevant Union legislation.
- (25) When assessing the application submitted pursuant to Article 10c(5) of Directive 2003/87/EC, the Commission will analyse to which extent the investments identified comply with these principles. If the information provided by Member States in their application pursuant to Article 10c(5) of Directive 2003/87/EC is not sufficiently detailed for the Commission to carry out a comprehensive assessment allowing for a well founded conclusion, the Commission may request additional information. If this additional information cannot be provided in due time, the Commission will reject the corresponding parts of the national plan. The Commission may also consider information and views from other sources to inform its assessment of the application.

---

<sup>3</sup> in 2007, no direct or indirect connection to the former UCTE network

<sup>4</sup> in 2007, connection to the former UCTE network through only a single line with a capacity of less than 400 MW

<sup>5</sup> in 2006, more than 30% of electricity was produced from a single fossil fuel



- (26) On the basis of the provisions of Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment<sup>6</sup>, Member States should verify whether an environmental assessment of the national plan is required.
- (27) The Commission further notes that the free allocation of emission allowances to electricity generators and the financing of corresponding investments required by Article 10c of Directive 2003/87/EC would in principle involve State aid within the meaning of Article 107(1) TFEU. Pursuant to Article 108(3) TFEU, Member States must notify measures involving state aid to the Commission. Following notification, Member States may not put proposed measures into effect until this procedure has resulted in a final decision by the Commission. The Commission intends to adopt compatibility criteria for assessment of this type of aid in the near future. An application pursuant to Article 10c(5) of Directive 2003/87/EC, and any consequent decision by the Commission, is entirely without prejudice to Member States' State aid notification obligations pursuant to Article 108 TFEU, and Member States should plan for any required State aid notifications accordingly. When assessing the allocation of free allowances and the national plans under Article 107(3) TFEU, the Commission will ensure that the latter do not result in undue distortions of competition, taking into account the objective of common interest pursued through Article 10c of Directive 2003/87/EC. In particular, where the national plan concentrates aid on a limited number of beneficiaries or where the aid is likely to reinforce the beneficiaries' market position, Member States should demonstrate that aid will not unduly distort competition beyond what is strictly necessary in the light of the overall objectives of this Directive.

#### **4.2. Eligible Investments**

- (28) In view of the title and overall context of Article 10c of Directive 2003/87/EC, investments eligible under this provision should concern the electricity sector and are to be undertaken from 25 June 2009. However, as a matter of principle, investments in other energy sectors are not excluded, on condition that they benefit from strong justification on the basis of Article 10c of Directive 2003/87/EC.
- (29) Member States are well positioned to decide which investments would best contribute to the modernisation of their electricity generation sector, and are responsible for identifying investments that comply with the requirements set out in the Directive. They also have to coordinate reporting on the implementation of investments undertaken under Article 10c of Directive 2003/87/EC at national level<sup>7</sup>.
- (30) In their national plans, Member States should set out a list of installations undertaking investments identified in the national plan and specify the list of investments scheduled to result from free allocation of emission allowances. They should also specify to which extent they will be funded by gains from emission allowances allocated free of charge and in which year of the investment cycle this would occur.
- (31) Investments funded by gains accruing from free allocation of emission allowances under Article 10c of Directive 2003/87/EC might be supplementary to investments

---

<sup>6</sup> OJ L 197, 21.7.2001, p. 30–37.

<sup>7</sup> See also chapter 6 and Annex VII.

partly funded from other Union sources (e.g funds made available from the new entrants reserve pursuant to Article 10a(8) of Directive 2003/87/EC, regional funds, TEN-E, European Economic Recovery Programme, European Energy Programme for Recovery, SET Plan, etc) if compliant with the requirements set out in this document and if compatible with those instruments or sources. In such cases, however, only the part of the investment benefitting from funds accruing from free allocation of emission allowances under Article 10c of Directive 2003/87/EC is relevant for the purpose of Article 10c of this Directive on condition that Union rules on overall funding limits are respected.

- (32) Further clarification with respect to the Commission's understanding of the terms 'infrastructure', 'clean technologies', 'diversification of energy mix and sources of supply', as used in Article 10c(1) of Directive 2003/87/EC is provided in Annex IV.
- (33) A non-exhaustive list of investment types eligible under Article 10c of Directive 2003/87/EC is provided in Annex V.

#### **4.3. Market value**

- (34) Pursuant to Article 10c(1) of Directive 2003/87/EC, the amount of investments identified in the national plan shall be equivalent, to the extent possible, to the market value of the free emission allowances. The market value of emission allowances must be used as a reference point for eligible Member States to determine, in their national plans, the amount to be invested at national level.
- (35) Since Member States should be able to provide a precise figure of the amount they intend to invest under Article 10c of Directive 2003/87/EC in their national plans, the market value of any emission allowances to be allocated for free pursuant to Article 10c of Directive 2003/87/EC should be determined in advance and should not be adjusted thereafter.<sup>8</sup>
- (36) The Commission recommends that the market value of emission allowances allocated for free should be derived from the model-based projections of European carbon prices as provided by the 2010 Commission Staff Working Document accompanying Commission Communication (2010)265 final<sup>9</sup>. The former provides updated projections taking into account new circumstances in the Union.
- (37) Accordingly, the annual values, as set in Annex VI and taking into account current legislation and emission reduction objectives, should be used as reference by Member

---

<sup>8</sup> The determination of the market value of free allowances for the purpose of this Communication is irrespective of market values to be determined under state aid assessments. It is also irrespective of the future evolution of European carbon prices during the third trading period. The Directive provides some flexibility in this respect in stating that the amount of the investment should be equivalent "to the extent possible" to the market value of the free allocation. This means that the determination of the market value of free allowances for the implementation of Article 10c should be based on a credible and persuasive ex ante assumption of the future evolution of carbon prices, but does not have to exactly reflect the daily values of spot, futures and forwards contracts on European carbon markets from 2013 to 2020.

<sup>9</sup> SEC(2010) 650, Commission Staff Working Document, accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Analysis of options to move beyond 20% greenhouse gas emission reductions and the risk of carbon leakage, Background information and analysis, Part II.

States in order to determine the annual market value of free allocation of emission allowances applied to their national plans. In the light of relevant state aid rules, Member States may decide to use higher values to determine the amount to invest: the figures given in Annex VI represent only a minimum level to be applied.

- (38) Except if a Member State can establish that this would be objectively impossible, the value of investments undertaken in the framework of Article 10c of the Directive in a given Member State must correspond to the market value of emission allowances allocated for free under its application. In applications pursuant to Article 10c(5) of Directive 2003/87/EC, Member States must provide the evidence necessary to enable the Commission to carry out its assessment pursuant to Article 10c(6) of Directive 2003/87/EC.

#### **4.4. Mechanism to ensure the balance between amount of investments and free emission allowances**

- (39) Directive 2003/87/EC implicitly acknowledges the fact that free allocation of emission allowances can result in windfall profits, in particular where operators can pass on the financial value of the emission allowances to their customers. This is the case for electricity producers and represents one of the reasons why Directive 2003/87/EC provides for auctioning as the default allocation rule, intended to "eliminate windfall profits"<sup>10</sup>.
- (40) By derogating from the principle of auctioning as default allocation method, Article 10c of Directive 2003/87/EC provides for free allocation of emission allowances to electricity generators, thereby implicitly accepting the appearance of windfall profits. However, Article 10c of this Directive clearly aims for these profits to be used for the modernisation of electricity generation in the Member State concerned.
- (41) A measure of Union law must be interpreted in the light of its objectives. On the basis of the provisions of Article 10c of Directive 2003/87/EC and in view of its underlying objective, it can be concluded that the windfall profits accruing to companies benefitting from free allocation of emission allowances must be used for the modernisation of electricity generation in the Member State concerned. In the same vein, an optimal use of the value of the emission allowances allocated for free would entail that the emission allowances allocated for free are not used to finance investments that companies concerned would have undertaken, in order to comply with other objectives and legal requirements accruing from Union law. Otherwise, they would only constitute additional profits, which Directive 2003/87/EC aims to eliminate and would consequently run counter to the objectives of the Directive. Moreover, this would cause undue distortions of competition incompatible with Article 10c(5) of the Directive.
- (42) For these reasons, a recipient of emission allowances allocated for free under Article 10c of Directive 2003/87/EC would need to use the value of the free emission allowances by means of undertaking an investment identified in the national plan pursuant to Article 10c(1). Where companies receive emission allowances for free without undertaking such an investment or where they receive more emission allowances for free than necessary to undertake the relevant investment(s) identified in

---

<sup>10</sup> See recital 15 of Directive 2009/29/EC

the national plan, they must be required to provide the value of the excess allowances to the relevant entity undertaking the investment.

- (43) Since the national plan designed to modernise electricity generation in the Member State concerned may contain investments to be undertaken by companies that are not subject to compliance with the Union scheme<sup>11</sup>, not all companies designated to undertake investments identified in the national plan would/could receive allowances allocated free of charge. In the light of the provisions of Article 10c(1) and 10c(4) of Directive 2003/87/EC, operators of transmission or distribution systems within the meaning of Article 2(4) and (6) of Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC<sup>12</sup> represent network operators within the meaning of Article 10c(4) of Directive 2003/87/EC. These companies may generally not be involved in the generation or supply of electricity. They would therefore not be able to receive allowances, but may nevertheless be required to undertake investments identified in the national plan.
- (44) In accordance with principle 3 of the principles for the national plan and in accordance with paragraph 27 of this guidance document, whenever investments in generation or supply of electricity, which were identified in the national plan pursuant to Article 10c(1) of Directive 2003/87/EC, would lead to undue distortions of competition or would threaten to reinforce dominant position, Member States should consider requiring beneficiaries of the free emission allowances to provide funds for investments in transmission and distribution systems, or for generation or supply of electricity not leading to such distortion.
- (45) It can also not be excluded that companies are allocated a number of free emission allowances of a value lower than would be required to cover an investment identified in the national plan. In this event, it may be appropriate to enable such companies to carry out the relevant investment identified in the national plan.
- (46) For these reasons, Member States may set up, where necessary and appropriate, a mechanism to account for the relevant transfer of funds in the cases described above.
- (47) Such a mechanism should in any case take account of the following requirements:
- (a) The value of emission allowances allocated for free in the framework of Article 10c of Directive 2003/87/EC has to be mirrored by the investments identified in the national plan and to be undertaken in order to match the amount of investments with the value of free emission allowances.
  - (b) The investments included in the national plan and financed through the mechanism have to comply with State aid rules.<sup>13</sup>

---

<sup>11</sup> Article 10c(4) explicitly mentions network operators, which in accordance with Union legislation on the internal market for electricity (Directive 2009/72/EC) have to be fully unbundled from the production of electricity. Operators of renewable electricity generation would also not receive allowances, but are covered by the scope of the investments laid down in Article 10c(1).

<sup>12</sup> OJ L 211, 14.8.2009, p. 55–93.

<sup>13</sup> See paragraph 27

- (c) Annual adjustments of funds and investments including annual carry over funds or investments to the following year should be allowed as long as the amount to be invested according to the national plan is equal to or exceeds the total market value of free emission allowances over the whole period for which the Member State has applied for derogation under Article 10c of Directive 2003/87/EC (cf. also section 2.2).
- (48) Using revenues Member States may gain from auctioning<sup>14</sup> or other state revenues, in order to fund investments listed in the national plan will result in windfall profits for power generators receiving free allowances under Article 10c of Directive 2003/87/EC. In the light of recitals 15 and 19 of the amending Directive 2009/29/EC as well as Article 10c(5)(e), and the overall approach and objectives of the Directive, which provides for auctioning as the default allocation method, the Commission will reject any application submitted pursuant to Article 10c(5) that pursues such an approach.

## 5. NON-TRANSFERABLE ALLOWANCES

- (49) Member States making use of the option to allocate allowances for free under Article 10c of Directive 2003/87/EC may decide that such allowances can only be used for surrendering by the installation in the year to and for which they had been allocated. A company receiving allowances subject to such conditionality would not be able to sell these allowances on the market, bank them into another year or allow them to be surrendered by another installation (even of the same company).
- (50) A Member State introducing such conditionality runs the risk of implementing Article 10c in a manner that would not be compatible with the objectives and architecture of the Union scheme, which is designed to achieve overall emission reductions in a cost-effective and economically efficient manner. It would not be legal for Member States to implement Directive 2003/87/EC in a manner contrary to its very objectives.
- (51) Non-transferable allowances would eliminate incentives to take emission abatement measures available to the holder of the non-transferable allowances that are feasible at costs below the prevailing emission allowance price. From the point of view of the holder of non-transferable allowances, carrying out these abatement measures would always appear more expensive than just covering the emissions with non-transferable allowances.
- (52) In view of these considerations, the Commission strongly recommends that Member States do not make use of the option to allocate non-transferable emission allowances. However, were Member States nevertheless consider this option necessary, they must demonstrate that this option is only used to an extent that is necessary to achieve an underlying objective reflected in Article 10c and that could not be achieved more effectively by other means. Member States' reasons should take due account of the incentives created in respect of emission reductions and the potential increase in ETS compliance costs resulting from the choice to make some allowances non-transferable.

---

<sup>14</sup> Article 10(3) only requires at least 50% of the revenues to be used for climate related purposes, while the other (maximum) 50% are entirely left to the discretionary of Member States.

- (53) In the light of and without prejudice to the above, the Commission furthermore takes the view that at least the majority of emission allowances allocated for free pursuant to Article 10c of the Directive should be transferable. It recommends restricting the number of any non-transferable allowances to one which does not exceed the total emissions accruing from the supply of electricity to sectors which would not risk introducing distortions of competition into the industrial sector of the Member State concerned or of the Union (e.g. this could be the case for the household sector). Further to Article 10c(5)(e) and 10c(6), the Commission would have to reject an application that would create undue distortions of competition.
- (54) In assessing an application submitted pursuant to Article 10c(5), the Commission will examine whether in the light of the objectives of Directive 2003/87/EC in general and the specific objective of Article 10c of Directive 2003/87/EC in particular the number of free emission allowances made non-transferable is justified, i.e. is necessary and proportionate, as well as whether this would create undue distortions of competition. The Commission will reject the application submitted pursuant to Article 10c(5) if it finds that these conditions are not satisfied.

## **6. MONITORING AND ENFORCEMENT**

### **6.1. Assessment of the application**

- (55) Pursuant to Article 10c(6) of Directive 2003/87/EC, the Commission will assess the application taking into account all relevant elements including those listed in Article 10c(5). It will also consider obligations stemming from the Treaties and general principles of Union law. In order to ensure an efficient assessment process, the application should be based on the template provided in Annex VII to this document. The Commission will only initiate its assessment of the application once all relevant information including the necessary evidence to underpin this information is submitted.
- (56) Article 10c of Directive 2003/87/EC has been introduced to enable the modernisation of electricity generation in eligible Member States. For this reason, the article provides for an exception from an essential principle of the Directive. In accordance with prevailing case-law, this exception must be interpreted and applied in a manner restricted to that which is necessary to achieve the objective established by Article 10c, without jeopardising the overarching objectives of Directive 2003/87/EC.
- (57) With respect to the value of emission allowances allocated free of charge, and their relation to the amount of the investments required by Article 10c(1) of Directive 2003/87/EC, it is important to note that emission allowances allocated for free would result in windfall profits accruing to companies benefitting from emission allowances allocated for free, if the value of these emission allowances were not used for investments or if the value of these emission allowances were used for investments that would have been undertaken, in order to comply with other objectives and legal requirements accruing from Union law. In such a case, there would not be a corresponding contribution to reaching the objective for which the free allocation of emission allowances pursuant to Article 10c has been accepted.
- (58) Furthermore, it is worth noting that the advantages arising from emission allowances allocated free of charge under Article 10c of Directive 2003/87/EC may cause undue

distortions of competition inconsistent with Article 10c(5)(e) if they are not used for the purpose for which they are to be allocated.

- (59) For these reasons, the assessment of the Commission will in particular place emphasis on whether the value of free emission allowances granted to eligible installations pursuant to Article 10c of Directive 2003/87/EC is used for the investments undertaken by these installations, or, where this is not the case, verify that the value of free emission allowances is made available to installations/operators or companies that have not received, or have not received sufficient emission allowances to cover respective investments identified in the national plan.
- (60) For the sake of transparency and to enable a well founded assessment of the application by the Commission, Member States should publish an application before submitting it to the Commission to enable the Commission to consider information and views from other sources. Any application submitted by a Member State should be considered environmental information and would be subject to the requirements set out in Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC<sup>15</sup> and Regulation (EC) N° 1367/2006 of the European Parliament and of the Council of 6 September 2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies<sup>16</sup>. Member States will also need to verify whether an environmental assessment of their national plan is required, on the basis of the provisions of Directive 2001/42/EC.

## **6.2. Monitoring and enforcement provisions pursuant to Article 10c(5) of Directive 2003/87/EC**

- (61) Clear and effective monitoring and enforcement provisions with respect to investments foreseen in the national plan must be set up by Member States to ensure proper execution of the investments identified in the national plan. Pursuant to Article 10c(5)(d) of Directive 2003/87/EC, these provisions should be set out in a detailed manner in an application for free allocation of emission allowances.
- (62) It is the Member States' responsibility to monitor and enforce investments identified in their national plans. When assessing a Member State's application for free allocation of emission allowances pursuant to Article 10c(6) of Directive 2003/87/EC, the Commission will attach particular importance to whether the Member State provides for clear and effective monitoring and enforcement provisions for the implementation of the national plan, including a mechanism to closely monitor and effectively enforce investments identified in its national plan. To this end, Member States should ensure that they have in force the laws, regulations and administrative provisions that are necessary to subject investments to scrutiny through the competent national authorities clearly identified in the application.
- (63) The following elements are important in this respect:

---

<sup>15</sup> OJ L 41, 14.2.2003, p. 26–32.

<sup>16</sup> OJ L 264, 25.9.2006, p. 13–19.

- The provisions should define a series of compliance indicators, examples of which are provided by Annex VIII, to be used by competent national authorities to assess progress and compatibility of investments with the requirements laid down in Directive 2003/87/EC and in this guidance document.
  - Field supervision should be foreseen in order to verify implementation of investments on the ground. This should include on-the-spot checks and an annual independent verification by external auditors for each investment. The auditors should issue an official document certifying the nature of each investment and the exact amount spent each year. Such documents should also attest to the veracity of expenditures claimed.
  - The provisions should put in place a third-party quantitative and qualitative assessment of investments to provide substantiated and independent evidence that investments comply with Directive 2003/87/EC, this guidance document, and the national plan.
  - Where companies do not comply with their obligations to invest (or do not contribute to investments by transferring the value of free emission allowances not invested to the mechanism to ensure balance between the amount of investments and free emission allowances), Member State should establish penalties and corrective measures with a view to recovering the balance between the value of free emission allowances under Article 10c of Directive 2003/87/EC and the amount of investments identified in the national plan. These measures should be effective, proportionate and dissuasive and should include:
    - An obligation to repay the emission allowances allocated for free (valued in accordance with the market value at the time of repayment) up to the amount of the observed lack of investment;
    - The automatic forfeiture of allowances from companies not complying with their obligations accruing from the respective national plan and this guidance document including re-converting the free emission allowances into allowances to be auctioned by the Member State concerned.
    - Dissuasive financial penalties of a punitive nature;
  - A carry-over of part of the investments foreseen for an installation from one year to the following year for an amount equivalent to the lack of investments observed that year should be possible. It is the Member State's responsibility to guarantee that the appropriate amount of funds is invested over the period of application.
- (64) The results of the monitoring and enforcement process, accompanied by substantiated evidence, are to be reported each year in the annual reports to be submitted by Member States to the Commission pursuant to Article 10c(1) of Directive 2003/87/EC. In particular, copies of external auditor certification documents (signed with official stamps) accompanied by an official translation into English (if these are not already in English), should be annexed to the reports. Member States may choose to make the relevant operators' annual reports public.



### 6.3. Annual reports pursuant to Article 10c(1) of Directive 2003/87/EC

- (65) Member States' annual reports on investments made in modernising electricity generation pursuant to Article 10c(1) of Directive 2003/87/EC should be submitted to the Commission by 31 January each year, starting in 2014. They should review the nature and amount of investments undertaken during the previous year<sup>17</sup>.
- (66) Annual reports should confirm with substantiated evidence that investments are implemented on the ground and comply with the requirements laid down in Directive 2003/87/EC and in this guidance document, and in particular, that they contribute to the reduction of greenhouse gas emissions.
- (67) The reports also need to demonstrate that the annual amount invested is coherent with the total amount of investments foreseen for the whole period of application, as set out in the Member State's national plan in reference to the market value of emission allowances allocated free of charge defined in this guidance document. Investments need not match the determined market value of emission allowances allocated for free on an annual basis. However, any discrepancy between the value of emission allowances allocated for free and the amount of investments should be remedied in the year subsequent to its occurrence to maintain a credible investment path over the period of application, taking into account the declining number of emission allowances that may be allocated for free.
- (68) Pursuant to Article 10c(4) of Directive 2003/87/EC, annual reports are to be based on the reports provided every 12 months by operators to Member States on the implementation of their investments set out in the national plan. They should also rely on supplementary sources of information, in particular official data and independently verified data. Sources of data and the references of evidentiary documents should be made available in the reports.
- (69) Member States' annual reports to the Commission should be made available in a transparent manner. Pursuant to Article 10c(4) of Directive 2003/87/EC, Member States' annual reports to the Commission have to be made public. In any case, the confidentiality of commercially sensitive information should be taken into account.
- (70) In its assessment pursuant to Article 10c(6) of Directive 2003/87/EC, the Commission will examine the correctness of the annual reports on the basis of the evidence provided. It may ask for further information if not all relevant evidence is submitted.
- (71) Where a Member State does not provide sufficient evidence, by means of its annual reports, that the investments identified in the national plan are carried out in accordance with the schedule and the value of free allocation of emission allowances as laid down in the national plan, and unless
- the Member State concerned is able to present through its annual reports sound justification for the lack of investments in a given year, or

---

<sup>17</sup> The first annual report submitted in 2014 may cover investments made from 25 June 2009 to 31 December 2013.

- the Member State concerned is able to provide evidence that corrective measures, as set out in its application pursuant to Article 10c(5) (d) have been enforced; or
- the annual report of the subsequent year provides evidence that the lack of investments observed in the previous year has been remedied,

the Commission takes the view that there is a breach of the conditionality inherently established by Article 10c of Directive 2003/87/EC with respect to the allocation of free emission allowances and the investments required by Article 10c(1). Since this conditionality is crucial to achieve the underlying objectives of Article 10c, a lack of investment results in additional gains to the company concerned and does not contribute to achieving the underlying objectives of Directive 2003/87/EC or of its Article 10c in particular. Consequently, this may lead to the illegal application of Directive 2003/87/EC contrary to its very objectives. It may also raise significant Commission concerns under State aid rules. If necessary, the Commission would launch an investigation under Article 108(2) TFEU and/or infringement procedures. A procedure under Article 108(2) TFEU may result in the suspension of free allocation under Article 10c of Directive 2003/87/EC of a number of emission allowances corresponding to the amount of the shortfall in investment. If the situation is not remedied, the Member State concerned should ultimately auction the corresponding number of allowances in accordance with the Regulation adopted pursuant to Article 10(4) of Directive 2003/87/EC.

## ANNEX I Determination of the maximum number of free allowances

In order to define the quantity for allocation of free emission allowances in 2013 and subsequent years for a Member State eligible to apply under Article 10c of Directive 2003/87/EC, the following steps would need to be taken:

- (a) Determine the average annual emissions from 2005 – 2007 of all eligible installations.
- (b) Determine the ratio of the annual average 2005 – 2007 of Gross Final National Consumption (GFNC) to the annual average 2005 – 2007 of Total Gross Electricity Production (TGEP). The resulting figure (in percentage) would indicate the share of emissions corresponding to GFNC<sub>05-07</sub>.
- (c) The average annual emissions from 2005 – 2007 (see (a)) would need to be multiplied by the share of emissions corresponding to GFNC<sub>05-07</sub> (see (b)).
- (d) The result would reflect the quantity of allowances to cover 100% of emissions from the generation of electricity corresponding to the GFNC. It has to be multiplied by a variable, which in 2013 must not exceed 0.7 (70%), must decline each year after 2013 and must be 0 (0%) in 2020, to arrive at the maximum of transitional allocation of free emission allowances allowed by Directive 2003/87/EC in 2013 and subsequent years.

The following formula would determine the maximum quantity of free emission allowances pursuant to Article 10c(2):

$$TQFA_x = (GFNC_{05-07} / TGEP_{05-07}) * AAQE^{EI}_{05-07} * a_x$$

Abbreviation	Explanation
TQFA <sub>x</sub>	Total quantity for free allocation in year x, with x representing each year from 2013 to 2020
x	Variable representing each year in the period from 2013 to 2020
GFNC <sub>05-07</sub>	Annual average 2005 – 2007 of Gross Final National Consumption
TGEP <sub>05-07</sub>	Annual average 2005 – 2007 of total gross electricity production (Eurostat code 107000 under product code 6000 "electricity")
AAQE <sup>EI</sup> <sub>05-07</sub>	Annual average quantity of emissions from eligible installations 2005 – 2007
a <sub>x</sub>	Variable representing the share of the annual average verified emissions in 2005 – 2007 corresponding to the gross final national consumption of the Member State concerned. The value of the variable must not exceed 0.7 (70%) in 2013 (a <sub>2013</sub> ), and must decline each year after 2013 and must be 0 (0%) in 2020.

In order to execute the calculation, Member States would need to identify the installations eligible for free allocation of emission allowances under Article 10c of Directive 2003/87/EC. As for installations not only producing electricity but also heat, only emissions attributable to the production of electricity must be taken into account.

Further clarification on the concept of Gross Final National Consumption as well as the formula to calculate it is provided in Annex II.

The total quantity of allowances resulting from the formula above would represent the maximum number of free allowances at national level in year x.

## **ANNEX II Gross Final National Consumption and the formula to calculate it**

The concept of gross final national consumption (GFNC) of electricity is the key for the determination of the maximum number of free emission allowances in accordance with Article 10c(2) of Directive 2003/87/EC. It does, however, not correspond to a statistical term defined or used by Eurostat and therefore, has to be interpreted in the context of Article 10c.

In the light of the relevant provisions of Article 10c of the Directive, gross final national consumption should encompass the amount of electricity supplied to the final consumer's door, i.e. the total consumption of electricity of all domestic consumers in a given country including the share of total electricity production that is necessary to generate, transport and distribute the electricity finally consumed.

With respect to exports and imports of electricity, only imports exceeding exports (net imports) are considered to matter in terms of GFNC in a given Member State. Since producers of electricity of a Member State should not receive free emission allowances for electricity that is consumed but not generated in this Member State, net imports have to be excluded from the determination of GFNC.

Gross final national consumption only concerns electricity and no other form of energy. For the sake of transparency, it should be based on publicly available data and generally acknowledged statistical concepts, as provided and used by Eurostat. The formula to calculate GFNC is provided below.

$$\text{GFNC} = \text{FEC} - \text{M}_{\text{NET}} + \left\{ \left[ \frac{\text{FEC} - \text{M}_{\text{NET}}}{\text{TGEP} + \text{M}_{\text{NET}}} \right] \cdot \text{TDL} \right\} + \left\{ \left[ \frac{\text{FEC} - \text{M}_{\text{NET}}}{\text{TGEP}} \right] \cdot \text{C}_{\text{EG}} \right\}$$

	<b>Statistical concepts</b>	<b>Eurostat code under product code 6000 "electrical energy"</b>
GFNC	Gross final national consumption of electricity	Not applicable
FEC	Final energy consumption (in terms of electricity)	101700
M <sub>NET</sub>	Net electricity imports	100600
TGEP	Total gross electricity production	107000
TDL	Transmission and distribution losses	101400
C <sub>EG</sub>	Electricity consumption of the electricity sector	101301

The annual average of 2005 – 2007 of the concepts indicated in the table represents the appropriate input to the formula. The outcome of the formula represents GFNC<sub>05-07</sub> as used in Annex I.

## **ANNEX III Specific pre-defined emerging technologies at the demonstration stage**

### **A. Project categories**

#### **I. CCS demonstration project categories (with minimum capacity thresholds<sup>18</sup>):**

- power generation: pre-combustion 250 MW;
- power generation: post-combustion 250 MW;
- power generation: oxyfuel 250 MW;

#### **II. Innovative RES demonstration project categories (with minimum size thresholds):**

- Bioenergy project subcategories:
  - Lignocellulose to intermediate solid, liquid or slurry bioenergy carriers via pyrolysis with capacity 40 kt/y of the final product;
  - Lignocellulose to intermediate solid, liquid or slurry bioenergy carriers via torrefaction with capacity 40 kt/y of the final product;
  - Lignocellulose to Synthetic Natural Gas or synthesis gas and/ or to power via gasification with capacity 40 million normal cubic metres per year (M Nm<sup>3</sup>/y) of the final product or 100 GWh/y of electricity;
  - Lignocellulose to biofuels or bioliquids and/ or to power including via directly heated gasification with capacity 15 million litres per year (Ml/y) of the final product or 100 GWh/y of electricity. Production of Synthetic Natural Gas is excluded under this sub-category;
  - Lignocellulosic raw material, such as black liquor and/ or products from pyrolysis or torrefaction, via entrained flow gasification to any biofuels with capacity 40 Ml/y of the final product;
  - Lignocellulose to electricity with 48 % efficiency based on lower heating value (50 % moisture) with capacity 40 MWe or higher;
  - Lignocellulose to ethanol and higher alcohols via chemical and biological processes with capacity 40 Ml/y of the final product;
  - Lignocellulose and/ or household waste to biogas, biofuels or bioliquids via chemical and biological processes with capacity 6 MNm<sup>3</sup>/y of Methane or 10 Ml/y of the final product;

---

<sup>18</sup> CCS power thresholds are expressed as gross electrical output before capture.

- Algae and/or micro-organisms to biofuels or bioliquids via biological and/or chemical processes with capacity 40 Ml/y of the final product;

NOTE: Sustainability criteria as provided in Directive 2009/28/EC of the European Parliament and of the Council<sup>19</sup> on the promotion of the use of energy from renewable sources must be met for biofuels and bioliquids within the meaning of that Directive.

- Concentrated solar power - project subcategories:
  - Parabolic trough or Fresnel system using molten salts or other environmentally-benign heat transfer fluid with nominal capacity 30 MW;
  - Parabolic trough or Fresnel system based on Direct Steam Generation with nominal capacity 30 MW. Direct steam solar temperature to be above 500°C;
  - Tower system using superheated steam cycle (either multi-tower or combination liner collectors - tower) with nominal capacity 50 MW;
  - Tower system using pressurised air with temperature above 750°C and solar hybrid gas turbine with nominal capacity 30 MW;
  - Large-scale Stirling dish power plants with solar to electric efficiency of over 20% and nominal capacity of at least 25 MW;

NOTE: Dry cooling, hybridization and (advanced) heat storage solution should not be included in the demonstration plants.

- Photovoltaics - project subcategories:
  - Large-scale concentrator photovoltaics power plants with nominal capacity 20 MW;
  - Large scale multi-junction Si-thin-film photovoltaics power plants with nominal capacity 40 MW;
  - Large scale Copper indium gallium (di)selenide (CIGS)-based photovoltaics power plants with nominal capacity 40 MW;
- Geothermal - project subcategories:
  - Enhanced geothermal systems in tensional stress fields with nominal capacity 5 MWe;
  - Enhanced geothermal systems in compressional stress fields with nominal capacity 5 MWe;

---

<sup>19</sup> OJ L 140, 5.6.2009, p. 16.

- Enhanced geothermal systems in areas with deep compact sedimentary and granite rocks and other crystalline structures with nominal capacity 5 MWe;
- Enhanced geothermal systems in deep limestone with nominal capacity 5 MWe;

NOTE: Combined Heat and Power (CHP) applications with the same electricity thresholds are only eligible with respect to electricity production

- Wind - project subcategories:
  - Off-shore wind (minimum turbines size 6 MW) with nominal capacity 40 MW;
  - Off-shore wind (minimum turbines size 8 MW) with nominal capacity 40 MW;
  - Off-shore wind (minimum turbines size 10 MW) with nominal capacity 40 MW;
  - Floating off-shore wind systems with nominal capacity 25 MW;
  - On-shore wind turbines optimised for complex terrains (such as forested terrains, mountainous areas): with nominal capacity 25 MW;
  - On-shore wind turbines optimised for cold climates (compatible with temperature lower than - 30°C and severe icing conditions) with nominal capacity 25 MW;
- Ocean - project subcategories:
  - Wave energy devices with nominal capacity 5 MW;
  - Marine/tidal currents energy devices with nominal capacity 5 MW;
  - Ocean thermal energy conversion (OTEC) with nominal capacity 10 MW;
- Hydropower - project subcategories:
  - Power generation with High Temperature Superconducting Generators: 20 MW;
- Distributed Renewable Management (smart grids)- project subcategories:
  - Renewable energy management and optimisation for small and medium scale Distributed Generators in rural environment with predominant solar generation: 20 MW on Low Voltage (LV) network + 50 MW on Medium Voltage (MV) network;



- Renewable energy management and optimisation for small and medium scale Distributed Generators in rural environment with predominant wind generation: 20 MW on LV network + 50 MW on MV network;
- Renewable energy management and optimisation for small and medium scale Distributed Generators in urban environment: 20 MW on LV network + 50 MW on MV network;

NOTE: The use of active loads (electric heaters/heat pumps etc) shall not be excluded.

## **Annex IV Infrastructure, clean technologies, diversification of energy mix and sources of supply**

From the context of how the notion “infrastructure” is used in relevant Union legislation<sup>20</sup>, there is a clear indication that the term "infrastructure" includes all network related facilities required to ensure the transport (transmission and distribution) of electricity. This is notwithstanding the fact that the notion “infrastructure” can also be conceived to cover electricity generation plants.

While there is no applicable definition of “clean technologies”, for the purpose of this guidance document, the Commission uses the term to refer to technologies for the production of electricity resulting in relatively lower carbon emissions or a higher level of environmental protection, including energy from renewable sources.

The Commission considers that increasing the share of renewable energy sources in the total primary energy supply and in electricity generation would always contribute to diversification of the energy mix and sources of supply in making the overall energy supply more balanced and less dependent on imports of fossil fuels.

With declining indigenous energy production, dependence on imported energy is set to rise<sup>21</sup>. For example, by 2020, Union gas imports are expected to increase to 73% from 61% today. While this is thought to represent a reasonable balance at Union level, a number of Member States, also eligible for Article 10c, rely on a single supplier for 100% of their gas needs. In such cases, investments designed to diversify gas supplies to these Member States might contribute considerably to diversify the energy mix and reinforce security of supply of these Member States. Such investment should be compatible with the aim to reduce the carbon intensity of the energy supply of these Member States, which is also a manner to reinforce security of supply, and at the same time reduce greenhouse gas emissions.

---

<sup>20</sup> Directive 2003/54/EC concerning common rules for the internal market in electricity and repealing Directive 96/92/EC, Directive 2009/72/EC concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, Regulation 714/2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 and Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC

<sup>21</sup> See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Second Strategic Energy Review – An EU Energy Security and Solidarity Action Plan, COM(2008)781

## ANNEX V Types of eligible investments

The types of investment eligible under Article 10c of Directive 2003/87/EC are the following:

Investment types	
A	Retrofitting of infrastructure
B	Upgrading of infrastructure
C	Clean technologies
D	Diversification of energy mix
E	Diversification of sources of supply

The following investments represent examples of investments eligible under Article 10c:

- (a) Modernisation of electricity generation with a view to rendering electricity generation more efficient and less CO<sub>2</sub> intensive (better relation between gross and net electricity consumption, i.e. increasing the share of net in gross electricity consumption and less CO<sub>2</sub> emissions per MW<sub>e</sub>);
- (b) Reducing CO<sub>2</sub> emissions by retrofitting coal power plants (state of the art)
- (c) Electricity generation through renewable energy sources (beyond the target laid down in the RES Directive) including corresponding network requirements
- (d) Replacing more CO<sub>2</sub> intensive generation capacity by less CO<sub>2</sub> intensive generation capacity
- (e) Carbon capture and storage
- (f) Smart grids
- (g) CHP including corresponding network requirements

The list is non-exhaustive. All eligible projects should be assessed for compatibility under State aid rules provided that they involve State aid.

**Annex VI: Model-based projections of carbon prices in the third trading period**

<b>Carbon price projections (annual average in Euro/ tonne CO2)</b>	<b>2010-2014</b>	<b>2015-2019</b>
in Euro 2008	14,5	20,0
in Euro 2005	13,6	18,7

These values stem from the baseline scenario defined in the Commission Staff Working Document accompanying the Communication from the Commission "Analysis of options to move beyond 20% greenhouse gas emission reductions and the risk of carbon leakage", Background information and analysis, Part II, SEC(2010)650.

## **ANNEX VII Template for the application pursuant to Article 10c(5)**

When submitting their application for transitional free allocation of emission allowances pursuant to Article 10c(5) of Directive 2003/87/EC, Member States should use the following template and specify the following information:

### **A. Eligibility of Member State**

Evidence that at least one of the conditions laid down in Article 10c(1) of Directive 2003/87/EC is met

### **B. Eligibility of installations considered to receive transitional allocation of free emission allowances, maximum number of free emission allowances and number of free emission allowances allocated to these installations including non-transferable allowances**

1. List of installations deemed to be eligible for transitional allocation of free emission allowances under Article 10c of Directive 2003/87/EC

2. Maximum number of free emission allowances in 2013 and subsequent years

3. Installation-based transitional allocation of free emission allowances

3.1. Number of free emission allowances on the basis of verified emissions 2005 to 2007

3.2. Number of free emission allowances on the basis of benchmarks

3.3. Detailed information on the number of emission allowances made non-transferable and allocated to eligible installations

### **C. National Plan and investments listed in the national plan, eligibility of investments in the national plan, balance between market value of emission allowances allocated free of charge and amount of investments**

The national plan sets out the strategy of the Member State concerned on how to modernise electricity generation during the period of transitional allocation of free emission allowances. It identifies the investments in this respect as well as the role of the investment types in achieving the objective. The national plan also attributes the execution of each investment in the national plan to a certain year taking into account the decreasing number of free emission allowances during the whole period of transitional free allocation of emission allowances.

For each investment included in the national plan, Member States should specify

- The company undertaking the investment
- The type of the investment in accordance with Annex V
- The amount of the investment
- The number and market value of emission allowances allocated for free to the company for the investment concerned; and

- The principles with which the investment complies including information necessary to assess compliance with the investment principles

Where Member States make use of a mechanism to ensure that the value of free emission allowances granted under Article 10c of Directive 2003/87/EC corresponds to the amount of investments identified in the national plan, Member States should specify the overall approach, the legal base and operational details of this mechanism. They should also provide for legal provisions ensuring that information on the net financial flows under this mechanism will be made available through the reports to be submitted to the Commission pursuant to Article 10c(1) of Directive 2003/87/EC.

#### D. Monitoring and enforcement provisions with respect to the intended investments pursuant to the national plan

Member States should provide and set out in detail

- A description of monitoring and enforcement provisions established in the Member State concerned including compliance indicators, provisions on on-site visits and independent verification of investments; and
- Provisions to ensure compliance with the obligation of companies to execute investments identified in the national plan including sanctions in case of non-compliance.

#### E. Transparency & public consultation

Member States should summarise the process by which the application and the plan has been prepared and how the public has been informed and involved.

## **ANNEX VIII Examples of compliance indicators**

The monitoring and enforcement provisions should contain compliance indicators used to demonstrate that investments comply with the principles laid down in the guidance, in particular with regard to the requirements for national plans.

Examples of compliance indicators are listed below (the list is non-exhaustive):

- (a) Comparison of the emission factor of the technology adopted by each installation due to investments undertaken under Article 10c of Directive 2003/87/EC with the emission factor of the technology used before the retrofitting/upgrading;
- (b) Comparison of the emission factor of the technology adopted by each installation due to investments undertaken under Article 10c with the emission factor of the Union-wide best available technology taking into account the fuel used;
- (c) Expected and implemented decrease in total greenhouse gases emissions generated by national electricity production due to investments undertaken under Article 10c (compared to business as usual scenario);
- (d) Expected and implemented decrease in the share of the dominant fossil fuel in national electricity production due to investments undertaken under Article 10c;
- (e) Expected and implemented efficiency gains in electricity generation process/distribution networks (in terms of MWh saved) due to investments undertaken under Article 10c and corresponding CO<sub>2</sub> emission reductions;
- (f) Expected and implemented increase of the share of CO<sub>2</sub>-free and less CO<sub>2</sub> intensive fuels in national energy mix due to investments undertaken under Article 10c;
- (g) Installed capacities (in MW) on stream in December 2008 that will be replaced by new less carbon intensive capacities financed due to investments undertaken under Article 10c;
- (h) Share of installed capacities on stream in December 2008 replaced by new less carbon intensive capacities financed due to investments undertaken under Article 10c, compared to total installed capacities in operation in December 2008;
- (i) Installed capacities (in MW) of renewable energy expected to be put on stream due to investments undertaken under Article 10c;
- (j) Share of funds accruing from Article 10c in total investment project;
- (k) For investments receiving funds under other Union sources and/or other public and private sources, share of each Union funding source and other public and private funds in total investment project;
- (l) Expected financial performance of investments undertaken under Article 10c (i.e. financial rate of return, costs/benefits, etc).