



# Fossil fuel subsidies from Europe's carbon market

THE LESSONS LEARNT WITH ARTICLE 10C OF THE EU ETS DIRECTIVE AND RECOMMENDATIONS FOR THE POST-2020 PERIOD

Carbon Market Watch Policy Briefing, April 2016



## **Executive summary**

Under the EU Emissions Trading System (EU ETS) the power sector no longer receives allowances for free but is required to purchase them from auctioning. An exception is made through the so called *Article 10c* of the EU ETS Directive. This provision allows lower-income Member States from Central and Eastern Europe to give allowances for free to electricity installations under the condition that they invest at least the equivalent monetary value of the free allowances in the modernisation and diversification of their energy systems.

The European Commission has already approved in total close to 680 million allowances for the period 2013 to 2019, representing a value of about €12 billion to be invested in modernizing energy systems. Independent analysis of planned investments reveals that Article 10c is used to support electricity production largely through subsidising coal power, including investments in the second largest fossil-fuel power station in the world (Belchatow lignite-fired power station in Poland).<sup>1</sup>

Rather than diversifying energy sources, three of the biggest beneficiary countries - Poland, Czech Republic and Romania – who account for 85% of the free allowances handed out, will essentially use the accompanying investments to modernise fossil fuel capacity, invest in new fossil fuel energy production, such as hard coal and lignite, or increase future coal consumption.

In addition to supporting unsustainable energy systems that risk locking in high carbon consumption, Member State analysis of the investment selection process has exposed other shortcomings. These include the lack of transparency in the investment selection and implementation process, poor public consultation on the investments decisions, and the risk that investments are non-additional.

The ongoing legislative process to revise the EU ETS rules for the post-2020 period provides an important opportunity to ensure that Article 10c moves away from subsidizing coal to becoming a tool to diversify the energy mix, reduce energy poverty, and lower the import dependency of the beneficiary countries. Such investments will help decarbonise the economy, while maintaining the potential to create more jobs in the construction sector and lead to significant health benefits.

#### **Key recommendations**

- Ensure that all investments are selected based on a **transparent process through a competitive bidding process** with full accessibility of relevant documents.
- Introduce selection criteria for the ranking of projects so that no investments in coal production are eligible and investments in energy efficiency and sustainable renewable energy sources are prioritized.
- **Base the investment selection process on open consultation** that provides for public input and takes the comments raised by stakeholders fully into account.
- Allow all interested parties to participate in the competitive bidding process, including **non-ETS operators**, such as renewable energy companies to ensure it is non-discriminative.
- **Guarantee that investments are additional** so that Article 10c does not support projects that would have been undertaken regardless of the option of derogation.

## Introduction

From 2013 onwards, emission allowances are no longer granted for free to power companies under the EU's Emissions Trading System (EU ETS). These companies instead have to buy all of their allowances through auctions. However, a provisional exemption was made for ten new Member States who can temporarily hand out allowances for free to their power installations. This provision in the EU ETS Directive is commonly referred to as "Article 10c".

Despite concerns from civil society that Article 10c has not had desired effects, the EU ETS proposal for the next trading round from 2021-2030 continues to allow lower-income states to give free allowances to their power sector. This policy brief looks at the planned investments and the experience with the current implementation of Article 10c and puts forward recommendations for the ongoing EU ETS revision for the post-2020 period based on the lessons learned.

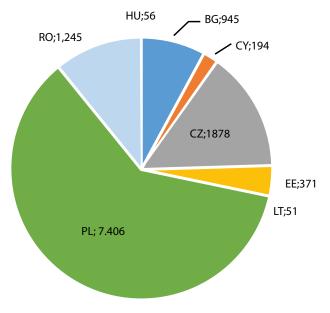
<sup>1.</sup> From the Polish national investment plan, see here

## What is Article 10c?

Article 10c of the EU ETS Directive allows ten countries to **hand-out free emission allowances to their power sector until 2019**, after which full auctioning in the power sector was supposed to be applied. With the exception of Latvia and Malta, all eligible countries decided to opt for this derogation.

Member States can use the derogation only **under the condition that at least the equivalent monetary value of the free allowances is invested in modernising electricity generation** through investments set out in a **national plan**. The investments in the national plan are carried out by the power companies (except in the case of Hungary), but the selection of investments is made by Member States.<sup>2</sup>

Between 2013 and 2019, the European Commission had approved almost 680 million allowances with an estimated market value of up to  $\in$ 12 billion that the eight Member States may give away to beneficiary power plants in order to invest in modernising the energy system.<sup>3</sup>



Graph 1: Estimated market value of the free emission allowances per MS 2013-2019 (million EUR)

Modernising the ageing energy infrastructure in Central and Eastern European (CEE) countries requires significant investments in renewable power generation and energy efficiency to diversify the energy mix, reduce energy poverty and lower the import dependency. At the same time, such low-carbon investments will help decarbonize the economy, create jobs, reduce air pollution and lead to health benefits.

## Drawbacks of giving free pollution permits to the power sector

Article 10c was introduced due to a call from the CEE countries, with the main motivation to prevent too sharp increases in power prices for households and to help the power sector cope more easily with the costs of making the transition to a climate friendly energy production.<sup>4</sup>The experience with the provision so far however shows that the achievement of these benefits is questionable at best.

Giving free allowances to the power sector has several disadvantages:

- Energy companies can make windfall profits at the expense of households. Power producers are able to pass on the nominal cost of emission allowances to consumers even when they receive them for free. Free allocation will there-fore result in windfall profits for power producers, while failing to reduce the energy bills for households.
- It could endanger the climate friendly transition of the economy. In countries such as Poland and the Czech Republic, over 70% of the free pollution permits have been given out to coal plants.<sup>5</sup> Coal is the world's largest single source of carbon pollution. The hand-out of free carbon permits to coal generators goes against the polluter-pays principle and hampers the transition to a renewable and efficient energy system.
- Taxpayers in CEE countries are picking up the bill as governments forego income. The allowances given for free to power companies originate from the Member States' auction volumes. This means that these governments lose out on public funds as they can auction less emission allowances.
- Free allocation could distort the internal energy market. The free allowances are distributed selectively to power

4. http://ec.europa.eu/clima/policies/ets/cap/auctioning/docs/hungary\_qa\_en.pdf

<sup>2.</sup> Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania

<sup>3.</sup> Calculations of allowances market value based on European Commission's proposed fixed market price, as provided by the 2010 Commission Staff Working Document accompanying Commission Communication (2010)265 final

<sup>5.</sup> Analysis by Sandbag based on the European Union Transaction Log

producers in the eligible country, but not to potential competitors in the same market or in neighboring Member States where no free allocation is given to the power sector. This can lead to an undue advantage and thus constitutes a market distortion.

## Good practice: the Hungarian practice of allocating the market value of allowances

Hungary decided to allocate free allowances only in 2013 for two large scale investments in a smart grid pilot project and a gas transmission interconnector between Slovakia and Hungary. The eligible operators were required to transfer the market value of the allowances to the Monitoring Authority in exchange for receiving free allowances. Investors received payments approved by the Monitoring Authority only after implementation of investments, to cover costs and expenses arising from it. Beneficiaries must report back to the Monitoring Authority twice a year on how they have implemented investments in the national plan.<sup>6</sup>

## The challenges with Article 10c investments

Although the implementation of Article 10c varies significantly between the eight Member States, analysis conducted so far reveals several common challenges associated with Article 10c:

- 1. Investments mainly benefited fossil fuels
- 2. Lack of transparency in the implementation of Article 10c.
- 3. Poor public consultation on the investments decisions.
- 4. Risk of *business-as-usual* investments.

#### 1. Investments mainly benefitted fossil fuels

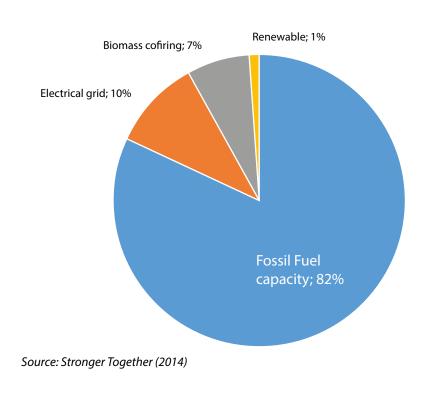
The experience to date demonstrates that Article 10c has so far not resulted in the diversification of the energy mix in lower-income Member States but on the contrary will lock these countries in carbon intensive energy production.

In 2013, only about 10% of the investments through Article 10c were related to clean technologies or the diversification of the energy mix. An overwhelming 90% of investments benefitted the upgrading and retrofitting of existing (fossil fuel) infrastructure.<sup>7</sup> This means that, so far, a clear majority of the Article 10c investments did not lead to a more diversified energy mix in countries such as Poland and the Czech Republic that are highly dependent on coal.

**In Poland** for example, 90% of the power production is coal and lignite-based, but still only about 8.5% of the investments listed in its national plan are classified as investments in renewable energy. Worse, almost all of these renewable projects (29 out of 31) provide support for biomass co-firing with coal, while there are no investments in wind or solar power listed.

Moreover, 82% of the Polish investments through Article 10c focus on fossil fuel capacity modernisation, including investments in Bełchatów, the second largest fossil-fuel power station in the world [see box]<sup>8</sup>. Such investments do not result in a more varied energy mix in Poland, lead to a lock-in to high carbon infrastructure, and fail to decrease Polish dependency on coal.

#### Investmensts in the Polish plan



6. State aid SA.34086 (2012/N) – Hungary Investments aiming at the modernisation of the Hungarian energy sector under Article 10 c) EU ETS Directive, see here

## Bad practice: investments under Article 10c subsidised the second largest coal plant in the world

The Belchatow power station in Poland is the largest coal power plant and biggest polluter in Europe<sup>9</sup>. Its power generation leads to air and water pollution, contamination of soil, immense contribution to health problems and a lower standard of living.

Through Article 10c the Belchatow lignite-fired plant plans to modernize 12 units included in their national investment plan, including two of the oldest units (unit 1 and 2). The units 1 and 2 were originally supposed to close down by the end of 2015, due to heavy air pollution and contribution to respiratory illnesses, <sup>10</sup>, but are now planned to close in 2017 and 2018 respectively<sup>11</sup>. Despite closing in 2 years' time, investments through Article 10c have already been made in unit 2<sup>12</sup>. Using investments for modernization of units that are to shut down shortly already indicates an unsustainable use of resources.

Their investment plan also includes building of a new lignite coal fuelled unit at Belchatow with the capacity of 858MW – the largest power unit in Poland<sup>13</sup>.

Data from the Commission shows that after benefitting from free pollution permits under Article 10c, the Belchatow coal plant emitted more carbon then beforehand; 37 million tonnes of CO2 in 2013 compared to around 30 million tonnes annually between 2007 and 2010<sup>14</sup>.

In the Czech Republic, almost half (about 46%) of investments listed in its Article 10c national plan support coal-fired installations. This includes the installation of condensing turbine TG6 operated by Teplárna České Budějovice, which was estimated to increase brown coal consumption by more than 24.000 tonnes per year.<sup>15</sup> This investment will increase greenhouse gas emissions, which is inconsistent with the overall aim of the EU ETS, and increases the country's already very high (56%) dependency on coal and lignite.

**In Romania**, the majority of investments listed in its national plan - 20 out of a total 29 - provide support for new fossil fuel energy production, predominantly natural gas, local and imported hard coal, and lignite. Furthermore, 4 investments finance the rehabilitation and modernisation of existing (fossil fuel) power plants. These investments contradict the aim of article 10c to reduce the share of coal in electricity production in the future.<sup>16</sup>

This shows that three of the biggest beneficiaries of Article 10c accounting for 85% of handed out free allowances in phase 3, have largely used them to either modernise fossil fuel capacity, support new fossil fuel energy production or increase future coal consumption.

## 2. Lack of transparency in the implementation of Article 10c

Undertaking modernisation projects in Central and Eastern Europe has a large impact on their national energy production, as well as on the EU's efforts to reduce greenhouse gas emissions. The projects are funded through the use of public resources, as governments forego revenues from auctioning these emission allowances. Despite this, detailed information on the investments is lacking, a state of affairs that does not allow for meaningful input and oversight from third parties and makes it very hard to assess the effectiveness of investments and their compliance with the overall aim of modernising the energy system, or with the EU's objectives to decarbonize its energy sector by mid-century.

The existing Directive requires countries that make use of the derogation to publish their applications as well as make annual reports on implemented investments public and available in a transparent manner.

However, experience shows that the reports that have been published vary in content. The national investment plans of benefi-

15. Environmental Law Service and the Centre for Transport and Energy (2011), Transitional free allowances for power generators in the Czech Republic, here, (analysis of Czech application which with some additional information was approved in 2012).

<sup>8.</sup> Stronger Together: investment support and solidarity mechanisms under the EU's 2030 climate and energy framework (2014), a report by CAN-Europe, Greenpeace and WWF.

<sup>9.</sup> See CAN-E (2014), Europe's dirty 30 here

<sup>10.</sup> Taken from: CAN Europe; EU extends life of Europe's biggest polluter while IPCC calls for coal phase out; <u>http://www.caneurope.org/coal-blog/725-europe-s-most-polluting-coal-power-plant-reverses-commitment-to-reduce-pollution-2</u>

<sup>11.</sup>Based on REMIT reporting, here

<sup>12.</sup> Polish Ministry of Environment, here

<sup>13.</sup> Data from PGE, here

<sup>14.</sup> European Commission, http://ec.europa.eu/clima/policies/ets/registry/docs/verified\_emissions\_2013\_en.xls

<sup>16.</sup> See CEE & Greenpeace (2012), THE ARTICLE 10C APPLICATION BY ROMANIA here

## Bad practice: lack of transparency in the Polish national plan

The lack of transparency of the national investments plans is related both to the accessibility of the information, the level of detail of the information that is in the public domain and the way the information is presented.

In the case of Polish national plan for example, the following problems are identified:

- There is no valid hyperlink to the Polish national plan in the Commission's decision on State aid free allowances to power generators under Article 10c<sup>17</sup>
- There is insufficient information publicly available:
  - The descriptions of investments do not give much explanation about the project. The national plan for example states 'Modernization B1' (Modernizacja B1), without detailing what is meant by this. The majority of investments is described this way.
  - There is no information on the investments costs, so the value of each investment is not known, and assessments on whether they are cost-efficient are impossible to conduct.
  - It is unclear how the investments contribute to emission reductions.
  - The national plan is only available in the Polish language

ciary countries are difficult or impossible to access, are extremely vague and, in some cases, are only available in Member States' national languages. The independent audit reports required for each operator have been published by only one Member State (the Czech Republic).

#### 3. Poor public consultation on the investment decisions

There has, so far, been little openness and consultation on the process by which investments are selected. According to national experience, many national plans were designed and approved without providing space for public input.

In the case of **Czech Republic**, the Ministry of Environment gave the public a one week window to provide comments, without providing public access to the actual national investment plan. By denying such access, the public was unable to provide any meaningful input on the specific investments. Eventually, the Ministry neither dealt with comments from the public, nor has it taken into account the outcomes of the public consultations.<sup>18</sup>

Similarly in **Bulgaria**, prior consultation on evaluation of investments was not conducted. Moreover, there was no public access to information on the investments of the coal industry companies to be included in the national plan.<sup>19</sup>

**In Romania**, the documents available online to the public differed from those submitted to the Commission and even left out some of the most contentious investments, such as the new Braila Power coal power plant.<sup>20</sup>

#### 4. Risk of business-as-usual investments

The EU ETS Directive specifies that investments through Article 10c should incentivise new projects that would not have taken place otherwise.

Nonetheless, the experience shows that a number of pre-existing projects benefited from investments through Article 10c. In the **Czech** national plan, at least 10 large investments were contested for starting up to four years before Article 10c was introduced in legislation in 2009, including investment in coal-fired power plant Ledvice and a new energy block at Kladno coal-fired thermal power station.<sup>21</sup>

<sup>17.</sup> State aid SA.34674 (2013/N) – Poland, Derogation of Article 10c of Directive 2003/87/EC on emission trading – free allowances to power generators, http://ec.europa.eu/competition/state\_aid/cases/249823/249823\_1531412\_94\_2.pdf

<sup>18.</sup> Environmental Law Service and the Centre for Transport and Energy (2011), Transitional free allowances for power generators in the Czech Republic, here; Environmental Law Service request for internal review (2012), here

<sup>19.</sup> ZaZemiata (2012) The coal sector in Bulgaria, http://climatebg.org/wp-content/uploads/2015/12/Coal-Sector-in-Bulgaria-2012.pdf

<sup>20.</sup> See CEE & Greenpeace (2012), THE ARTICLE 10C APPLICATION BY ROMANIA here

<sup>21.</sup> Environmental Law Service & CDE (2012) Undue distortions of competition and state aid involved in the free

allocation to electricity producers in the Czech Republic, here

<sup>22.</sup>See CEE & Greenpeace (2012), THE ARTICLE 10C APPLICATION BY ROMANIA here

**In Romania**, two investments were challenged for being inaugurated already in 2008. This includes investments in Brazi gas fired power plant by Petrom, the largest oil and gas producer in South-Eastern Europe, and investments in a new power unit on imported hard coal for Braila Power.<sup>22</sup>

## The EU ETS revision proposal

The optional free allocation to the power sector in CEE countries (Article 10c) was originally foreseen to be a temporary derogation and phased out by 2020. However, the EU ETS revision proposes to extend the derogation for another decade for ten lower-income states.<sup>23</sup> These countries will continue to be allowed to give up to 40% of their auctioning volumes (before redistribution) for free to power producers for the modernisation of the energy sector. This means that up to 680 million allowances can be handed out for free to the energy sector in the 2021-2030 period, with a market value of up to  $\in 17$  billion.<sup>24</sup>

The EU ETS revision<sup>25</sup> for the post-2020 period proposes some changes to Article 10c. With regard to the selection of investments, the current practice based on national plans designed by Member States is not continued. It is replaced by the selection of investments at the national level through an open competition based on targeted performance, organised through a competitive bidding process. The investment representing the best value for money is selected.

According to the proposal, the competitive bidding process would be based on "clear, objective, transparent and non-discriminatory selection criteria for the ranking of projects" to ensure that the investments are additional, lead to emission reductions, and represent the best value for the money. The proposal sets requirements for the Member States to publish national framework for competitive bidding process and selection criteria for public comment.

By selecting projects based on a procurement method which provides open view to bids from competing operators, and to criteria by which the bids will be evaluated, the competitive bidding contributes to more transparency in comparison to the current practice. The European Commission suggests that competitive bidding applies to all investment projects exceeding €10 million. For investments falling under this value, the Commission proposes that Member State make a selection based on objective and transparent criteria. That means that the investments under €10 million would be selected in line with the current practice of submitting national investment plans.

## **Conclusion and recommendations**

So far the experience with the implementation of Article 10c has revealed that a number of investments fail to reflect the objective of diversification of energy systems. Furthermore, the process suffers from non-transparency and inadequate public consultation.

Carbon Market Watch's preferred approach is that from 2020 onwards the hand out of free pollution permits is limited and instead all companies need to buy allowances from auctioning. This is the most effective method to reward efficiency, encourage climate-friendly investments, and generate auctioning revenues that can be invested in the economy.

The ongoing legislative process for the next ETS trading round from 2021-2030 provides an important opportunity to revisit the Article 10c rules under which the power sector in lower-income countries are able to receive free pollution permits. To avoid fossil fuel subsidies and enhance transparency, Carbon Market Watch makes the following recommendations:

#### Select all investments through a competitive bidding process

To ensure that free allocation is only used to promote real and low-carbon investments which provide the best value for the money, all investments, including those under the value of €10 million, should be selected through competitive bidding process. This would not only safeguard investment's economic-efficiency and contribute to increased transparency regarding the selection of investments but can also avoid the risk of market distortion, which is not the case with the current selection process based on national plans.

<sup>23.</sup> Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia

<sup>24.</sup> See Sandbag (2016), Sharing the Burden here, and assuming the EC's estimated average carbon price of €25/tCO2

<sup>25.</sup> See proposal for amending Directive 2003/87/EC, 15.7.2015, here

#### Introduce overarching selection criteria for the ranking of projects for all Member States

To achieve the EU's 2050 decarbonisation target, the ETS cannot continue giving free pollution permits to unsustainable energy systems that will lock in coal dependency. Article 10c should instead be primarily used for investments into sustainable renewable energy and energy saving technologies. Fundamentally, investments through Article 10c should eliminate the need for such derogation in the future. The selection criteria should ensure that:

- No investments in coal production are eligible.
- Only investments that diversify the country's energy mix and foresee significant levels of CO<sub>2</sub> reductions are chosen. Investments in energy efficiency improvements and sustainable renewable energy sources, such as projects related to grid development that enable optimal integration of renewable energy into the electricity system, should be prioritised.
- Investments do not undermine EU's objective of 95 % emissions reductions by 2050.
- Investments with environmental, social and economic co-benefits are prioritised.
- Small-scale investments under €2 million<sup>26</sup> projects are prioritised.

#### Allow for open consultation and transparency in the investment selection process

This should provide public input to setting the precise selection criteria for the ranking of projects, and to the review of applications submitted for competitive bidding before the final approval. Open consultation should ensure full transparency and accessibility of relevant documents, a window for public input of at least 30 days, and that comments raised by stakeholders are fully taken into account. Member States should summarise the process by which the public has been informed and involved and make this information publicly available.

#### **Ensure additionality**

The use of Article 10c should be an incentive to carry out modernisation and diversification of the energy sector in a country. Therefore free allocation should not support projects that would have been undertaken regardless of the derogation or that pursue compliance with other requirements under the Union law. This means that the investments should not be used for so called "necessary restructuring" to comply with the limits of air-pollutant emissions under the Industrial Emissions Directive. Such practice would be in contradiction with the principle of additionality and provide an excuse to extend the life of polluting power plants. Furthermore, only investments implemented from 2020 should be eligible.

#### **Increase transparency**

The submission of the annual reports and investment lists should be based on uniform templates for all Member States, including detailed information on investment description, the value of each investment and how it contributes to emission reductions. The Commission should make the lists of investments of the Member States concerned publicly available (with an official English translation).

#### Allow all interested parties to participate

The competitive bidding process should be non-discriminative and should allow all interested parties to participate, including **non-ETS operators**, such as renewable energy companies.

26. According to the Impact Assessment, <u>here</u>, €2 million is the median size of investments.

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