



# Advisory Report

to the Budget Committee of the  
German Parliament

Pursuant to  
**article 88 (2)**  
**Federal Budget  
Code**

on the Federal Government's revenue  
from emissions trading

This report comprises the final audit result issued by the German SAI in accordance with article 96 (4) Federal Budget Code.

This report may only be disclosed to third parties after its final deliberation in Parliament. A decision on its disclosure may only be made by the German SAI.

## Table of contents

page

<b>0</b>	<b>Executive summary .....</b>	<b>3</b>
<b>1</b>	<b>Subject matter and motivation for the report.....</b>	<b>6</b>
<b>2</b>	<b>Basics of emissions trading.....</b>	<b>7</b>
2.1	Background information on climate policy .....	7
2.2	Economic context .....	8
2.3	Design of European emissions trading .....	9
2.3.1	Coverage.....	9
2.3.2	Trade in allowances.....	9
2.3.3	The past three trading periods – an overview .....	11
2.3.4	New mechanisms introduced in the third trading period.....	12
<b>3</b>	<b>Development of emissions trading .....</b>	<b>14</b>
3.1	Development of prices during the second trading period.....	14
3.2	Revenues obtained by the Federal Government from emissions trading .....	16
3.3	Surplus of emission allowances .....	18
3.3.1	Development of the supply of emission allowances .....	18
3.3.2	Analysis of the European Commission .....	20
3.3.3	Stance of the Federal Government .....	21
3.4	Revenues obtained by the Federal Government from the national reserve .....	23
<b>4</b>	<b>Revenues of the Energy and Climate Fund.....</b>	<b>25</b>
<b>5</b>	<b>Evaluation by the German SAI .....</b>	<b>28</b>

## 0 Executive summary

The aim of introducing emission rights was to reduce the emission of gases harming the climate. The Federal Government intended to use the revenues from emissions trading to finance additional expenditure on energy transition and climate protection. To make up for the declining revenue resulting from falling prices in emissions trading, the Federal Government needs to cut planned expenditure or raise funds from other sources.

In its report, the German SAI outlines the opportunities and risks of emissions trading at the European level so that these may be adequately considered in the context of the federal budget and the Energy and Climate Fund.

- 0.1 The Federal Government's budget estimates of the revenues from emissions trading for the years 2008-2012 totalled €3.9 billion. In this period, however, actual receipts totalled €3.2 billion. The annual average price paid for an emission allowance was €3.16 (in 2008) and €7.32 (in 2012) respectively. In its first 2014 draft budget, the Federal Government assumed the average price to be €4.50.
- 0.2 In general, the German SAI is of the opinion that emissions trading is an appropriate means of reducing greenhouse gas emissions. The market currently has a surplus of about 2 billion emission allowances which led to a massive price drop. This surplus alone could cover one year's emissions in Europe. This surplus is caused not only by unpredictable external factors – such as the euro area crisis – but also by particularities of the European emissions trading system:
  - The number of emission allowances on offer in the market is not only determined by market participants. The overall number of allowances is limited by an emission cap that is set annually. This cap is determined in advance for a defined trading period. The cap set for the years 2008-2012 proved to be excessive because the demand for emission allowances was lower than expected, particularly due to the economic and financial crisis.
  - The option granted to operators of installations to use international credits also contributed to a surplus of emission allowances. This proved true especially for Germany. In Germany the total number of credits was significantly higher than the total volume of the annual surplus.

The German SAI has identified some areas in which action is needed and drawn attention to them, thus enabling the Federal Government to respond quickly and effectively to new developments in emissions trading.

0.3 At present, the Federal Government's climate change goals are significantly more ambitious than those at European level. The European Union plans to align emissions trading particularly with European climate change goals. Emissions trading will then no longer be an instrument to implement additional and higher national climate change goals. According to the German SAI's estimate, the Federal Government will need to use other measures when pursuing more ambitious climate change goals than those set at European level.

0.4 The European Union decided to postpone the auctioning of up to 900 million allowances within the period 2013-2020. The German SAI is of the opinion that this is not a long-term solution for the existing market imbalance. The answer to the question as to whether the emissions trading system can be sufficiently protected from external influences by establishing the market stability reserve proposed by the Commission for the period beginning in 2020 is especially contingent upon the rules set up for this new mechanism.

0.5 A reform of the European emissions trading system could promote a higher reduction in greenhouse gas emissions. On the basis of its audit work, the German SAI identified the following options:

- tightening the criteria for determining the Europe-wide caps;
- expanding the scope of emissions trading; and
- further reducing the volume of free allocations.

The German SAI believes that it would be worth considering the question as to whether such reform of the European emissions trading system would reduce dependence on cyclical fluctuations and eliminate adverse effects caused by an interaction with other climate protection instruments in place. In order to be able to make decisions on climate policy in the future, the Federal Government will have to consider the impact of the alternative options in environmental, economic and energy policy.

Since decisions on emissions trading are made at EU-level, the achievement of German climate policy objectives largely depends on the extent to which the Federal Government can assert its position within the European Union.

- 0.6 Emissions trading may be considered a climate protection instrument but not a reliable financing instrument. The revenues from emissions trading received by the Energy and Climate Fund are not adequate for sustainably financing the politically desirable additional expenditures on energy transition and climate protection. It is even more difficult to predict the revenues to be earned in the current phase of emissions trading (2013-2020). The number of allowances to be auctioned is now exclusively determined at EU-level.

The German SAI recommends that the revenue from emissions trading should in future be disclosed again in the federal budget. And all expenditure on energy transition and climate protection should also be fully disclosed in the federal budget. As a consequence, the Energy and Climate Fund should be wound up.

## 1 Subject matter and motivation for the report

The introduction of emission allowances aims to cut the emissions of greenhouse gases. The Federal Government intends to use the revenue from emissions trading to finance additional expenditure on energy transition and climate protection. To make these additional efforts transparent, such revenue and the related costs are disclosed in the budget and accounts of the Energy and Climate Fund, an off-budget entity.

The price of allowances fell steeply so that the revenues received by the Federal Government are lower than anticipated. Therefore, the Federal Government needs to scale back planned expenditures and/or find other sources of financing. This prompted the German SAI to examine the risks to which these revenues are exposed and the way Federal Government uses these revenues. With this report, the German SAI informs the Budget Committee of the Federal Parliament and the Federal Government about its findings. In its conclusions, the German SAI also considered the comments of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety<sup>1</sup>, which has the lead responsibility in these matters, of the Federal Ministry of Finance and the Federal Ministry for Economic Affairs and Energy.

In its report, the German SAI highlights the opportunities and risks inherent in European emissions trading so that these may be adequately considered in the context of the federal budget and the Energy and Climate Fund. For a better understanding of the report, its chapter 2 outlines the European emissions trading system. Chapter 3 focuses on the factors impacting on the Federal Government's revenues from emissions trading. Chapter 4 describes the situation of the Energy and Climate Fund. In chapter 5, the German SAI presents its assessment of the current situation.

<sup>1</sup> (Blank – refers to an abbreviation in the German source text which has not been used in this translation.)

## 2 Basics of emissions trading

### 2.1 Background information on climate policy

The increasing global emission of greenhouse gases by industry, households and traffic contributes to global warming. According to experts, this will have grave consequences such as a rise of the sea level, desertification, or the melting of glaciers. Reducing the emission of greenhouse gases is an essential component of international climate policy.

#### **The 2005 Kyoto Protocol**

In 2005, numerous industrial countries and countries in transition signed the so-called Kyoto Protocol which calls for cutting greenhouse gas emissions between 2008 and 2012 by at least 5 per cent compared to the emissions in the base year 1990. The European Union and its Member States committed themselves to reducing EU-wide emissions in this period by 8 per cent. With 21 per cent<sup>2</sup>, Germany's emission reduction target was above average. In order to achieve its climate protection goals, the European Union established the European Emissions Trading Scheme one instrument among others which is to promote the reduction of greenhouse gas emissions in an economically efficient way.

#### **The 2007 EU climate package**

In 2007, the European Union decided to reduce greenhouse gas emissions by 20 per cent compared to the base year 1990 by 2020 or even by 30 per cent if other industrial countries also adopt such target. Within the purview of the European emissions trading scheme, emissions should be reduced by 21 per cent and in all other fields by 10 per cent compared to year 2005 by 2020.<sup>3</sup>

#### **2012 Climate Change Conference in Doha**

At the 2012 Climate Change Conference in Doha, the European Union and its Member States agreed to reduce greenhouse gas emissions between 2013 and 2020 by 20 per cent compared to the base year 1990. This commitment shall also

<sup>2</sup> According to the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, preliminary calculations show that greenhouse gas emissions dropped by 25.5 per cent in Germany in 2012 (compared to 1990). Thus, the Federal Government fulfils its international obligations of reducing greenhouse gas emissions.

<sup>3</sup> Commission communication to the European Parliament and other bodies as of 23 January 2008: 20 20 by 2020. Europe's Climate Change Opportunity, COM (2008) 30 final.

be fulfilled jointly. A decision on each Member States' share has not yet been made.

Since 2007, the Federal Government and its constituting political parties aim to reduce greenhouse gas emissions at national level by at least 40 per cent compared to the base year 1990.

## 2.2 Economic context

Without state intervention, polluting the air with emissions such as greenhouse gases does not entail costs for the polluter. As a result, there is no cost factor that could curb pollution. In order to contain pollution, governments may use various instruments (cf. table 1).

Table 1

### Instruments to contain pollution

Instrument		Example
Information and awareness-raising campaigns		Campaigns implemented by the Federal German Environment Agency ( <i>"How big is your nitrogen footprint?"</i> )
Legal measures		Determination of pollution caps in regulations on the implementation of the Federal Pollution Control Act
Economic instruments	Price-based instruments	Promotion of public transport systems in cities and tightening parking space management.
	Quantity-based instruments	Emissions trading organised by governments

Source: Chart issued by the German SAI.

The use of economic instruments implies incentive effects. Price-based instruments such as subsidies or taxes are intended to influence the purchasing decisions of private consumers and the investment decisions of businesses and thus to reduce air pollution. In using quantity-based instruments such as emissions trading schemes, a government issues a limited amount of marketable allowances giving the owner the right to pollute the air with greenhouse gases. By limiting the amount of allowances, a government assigns a certain financial value to emissions. As a result, the price is determined by the artificially restricted supply of allowances and the demand for them. Where a company needs to purchase more allowances due to its high emissions, it may invest in

environment-friendly technologies which release less greenhouse gases or purchase additional allowances held by other companies. If companies increasingly decide to invest in such technologies, the demand for allowances as well as their price will fall, provided that all other circumstances remain unchanged. The primary objective pursued by emissions trading, namely to reduce emissions, is attained in this case even if the government's revenues decline owing to lower demand for allowances and lower prices. Government revenues from the sale of allowances are thus merely a side effect of emissions trading.

## **2.3 Design of European emissions trading**

### **2.3.1 Coverage**

In addition to the EU Member States, countries participating in the European emissions trading scheme are (since 2008): Iceland, Liechtenstein and Norway; since January 2013: Croatia.<sup>4</sup> The number of allocated allowances is defined on the basis of the emissions produced by the installations registered in the respective country. In the period 2008-2012, 20 per cent of all allowances were allocated to installations in Germany, i.e. the largest portion of allowances. Almost half of the allowances available were allocated to the United Kingdom, Poland, Italy, Spain and France; the remaining third was allocated to the other 24 participating countries.

The European emissions trading scheme currently covers the emission of greenhouse gases from power stations and energy-intensive industries. Moreover, commercial aviation emissions have also been covered since 2012. As a result, some 40 per cent of greenhouse gas emissions within the European Union come under the scheme. Greenhouse gas emissions from private households, vehicles or ships are not covered.

### **2.3.2 Trade in allowances**

Each year, all operators of installations covered by the scheme need to purchase allowances in an amount that cover their emissions of greenhouse gases. An emission allowance gives the holder the right to emit one ton of carbon dioxide

<sup>4</sup> Croatia became an EU Member State on 1 July 2013.

(CO<sub>2</sub>) or the volume of another greenhouse gas having the same potential climate warming effect as one ton of CO<sub>2</sub>.

Every year, operators must determine the volume of their emissions and purchase an equivalent number of allowances to be surrendered to the responsible national body (in Germany: Federal Environment Agency). If an operator has failed to comply with this requirement in the period 2008-2012, such operator has to pay a fine of €100 per lacking allowance. As from 2013, this amount is to rise in line with the increase of the European Consumer Price Index. In Germany, expenses linked to the acquisition of allowances at operator level (administrative burden) are estimated to amount to €35 million per annum in 2008-2012 and to €12 million per annum in 2013-2020.

### **Allocation of allowances**

For each year in advance, the overall number of emission allowances that may be allocated in connection with the EU emissions trading scheme is limited by a cap. Such cap is defined on the basis of economic and climate-related considerations within the European Union and the participating countries. In 2006, the participating countries were required to submit to the European Commission their plans regarding the number of allowances to be allocated per year for the period 2008-2012. The coordination of such planning between the Commission and most countries was accomplished in 2006 and 2007. In Germany, the cap on the number of emission allowances for the period 2008-2012, remaining unchanged from year to year, was established by law in 2007. For the period from 2013, the cap that is applicable across Europe<sup>5</sup> will decline annually.

In compliance with the cap, emission allowances are generated in an electronic registry at the beginning of each year. The participating countries allocate a certain share of emission allowances to operators free of charge at the beginning of a year (e.g. on the basis of historical emissions or comparable figures of installations with particularly low emissions). During a year, the participating countries offer a certain share of allowances for sale. Not only operators but also

<sup>5</sup> In this report, the terms “across Europe” or “Europe-wide” refer to the geographical coverage of the European emissions trading scheme (cf. table 2).

other individuals and legal entities may acquire these emission allowances. Another share of allowances (e.g. for new installations) are set aside as a reserve.

### **Emission market**

The market at which emission allowances are sold or allocated free of charge is called the primary emission market. Operators may use their allowances to comply with the requirement to surrender an adequate number of allowances to the responsible national body. All other allowances may be sold on the so-called secondary emission market. The same holds true for other purchasers of allowances. For example, banks may be commissioned to sell allowances on an energy exchange, or they sell such allowances themselves outside the energy exchange. Once sold, the emission allowances will be deleted from the seller's account in the electronic registry and credited to the purchasers account.

The answer to the question as to whether allowances that are not needed are sold at the secondary market also depends on the holders' price expectations. Regarding the currently unlimited negotiability of allowances, they will not sell them, if they expect to sell at a higher price in future. Not only the pollution emitters' current need for allowances but also the expectations of market participants have an impact on the prices.

Where emission allowances are sold and paid for at once, this is called a spot transaction. In case of a forward transaction, purchaser and seller agree on a price and amount of allowances to be sold at the time of purchase; payment and transfer of the allowances, however, will take place later.

### **2.3.3 The past three trading periods – an overview**

The first trading period (2005-2007) was a “pilot phase” in which the required institutional and operational infrastructure of the European emissions trading system was established. In the second trading period (2008-2012), the system was fundamentally revised and extended to include new mechanisms. In particular, the Commission succeeded in lowering the cap on the number of emission allowances. The current third trading period (2013-2020) significantly differs from the first two periods (cf. item 2.3.4 of this report for more information). Table 2 summarizes the main differences between the three trading periods.

Table 2

**Characteristics of the first three emissions trading periods at EU-level**

	<b>First trading period (2005-2007)</b>	<b>Second trading period (2008-2012)</b>	<b>Third trading period (2013-2020)</b>
Regional scope	EU Member States since 2008: Iceland, Liechtenstein, Norway since early 2013: Croatia (EU Member State since 1 July 2013)		
Sectoral scope	Use of credits generated through international climate protection projects possible within limits; Limitations tightened since 2013		
	Energy sector and energy-intensive industries since 2012: aviation industry		
Cap on number of allowances	Cap for Germany: 499 million	Cap for Germany: 453 million	Single cap applicable to the entire European emissions trading system (for 2013: 2.084 billion)
Allocation of allowances	Free allocation <sup>a</sup>		Free allocation and sale
Trade in allowances	Only within the trading period		Allowances transferable to subsequent periods

Explanation: The European Emissions Trading Directive stipulated that at least 95 per cent of the allowances are to be allocated free of charge in the first trading period. Most participating countries, including Germany, allocated all allowances free of charge.

Source: Produced by the German SAI. Table data are taken from audit findings.

### 2.3.4 New mechanisms introduced in the third trading period

Already in 2009, the European Union defined the framework conditions applicable to the third trading period of European emissions trading, including for the first time a European annual cap on the number of emission allowances for fixed installations. Such cap is to decrease in the third trading period by 1.74 per cent per annum. The main factor impacting the calculation of the cap is the average annual number of allowances allocated by the participating countries in 2008-2012. In 2013, the cap that is applicable across Europe is 2.084 billion allowances.

#### **Auctioning and free allocation of allowances**

In the third trading period, significantly more allowances are to be auctioned than in the past. All allowances earmarked for the energy sector are to be auctioned.

A number of allowances will be allocated to industrial sectors free of charge; however, the share of allowances to be auctioned is to increase from 20 per cent to 70 per cent in the third trading period. Certain industrial sectors having high costs due to emissions trading will be exempted. These sectors will be allocated allowances free of charge on the basis of emission levels to be established by the Commission. Such emission levels define the volume of greenhouse gases that may be emitted by efficiently working installations per unit produced. In case the emissions are higher, the number of allowances that were allocated free of charge will be insufficient and the operator will need to purchase additional allowances. There is concern that companies that do not benefit from free allocation of allowances could move production sites to countries that are not subject to the European emissions trading scheme or could prefer to import relevant products from such countries. Global greenhouse gas emissions would then increase. The free allocation of allowances is to counteract such a development.

The Commission determines the share that may be auctioned by participating countries. Annually, 19.6 per cent of this share will be allocated to Germany. As in the past, the participating countries decide on the use of the revenues from auctioning allocated allowances.

The largest share of aviation allowances is allocated free of charge (85 per cent in 2012, 82 per cent after 2012). The remaining allowances – apart from a Europe-wide reserve of 3 per cent – are to be auctioned.

### **Credits from projects implemented outside participating countries**

To a limited extent, operators have the possibility to use credits for emission reductions generated through international climate protection projects in developing countries and countries in transition (e.g. wind farm projects or replacement of traditional fireplaces by modern wood-fired stoves in Africa) in order to fulfil the requirement to surrender an adequate number of allowances to the responsible national body. In the third trading period, this possibility will be further limited compared to the second period. In the second trading period, German operators were allowed to use credits of up to 22 per cent of the allowances allocated in this trading period. Where such maximum limit has not been reached, they may do so subsequently in the third trading period. Operators of new installations may use credits only up to 4.5 per cent of their volume of emissions in the third trading period. In deviation from the previous arrangement, the use of credits generated through new international climate protection projects

after 2012 is prohibited unless such projects are carried out in one of the least developed countries.

### **3 Development of emissions trading**

#### **3.1 Development of prices during the second trading period**

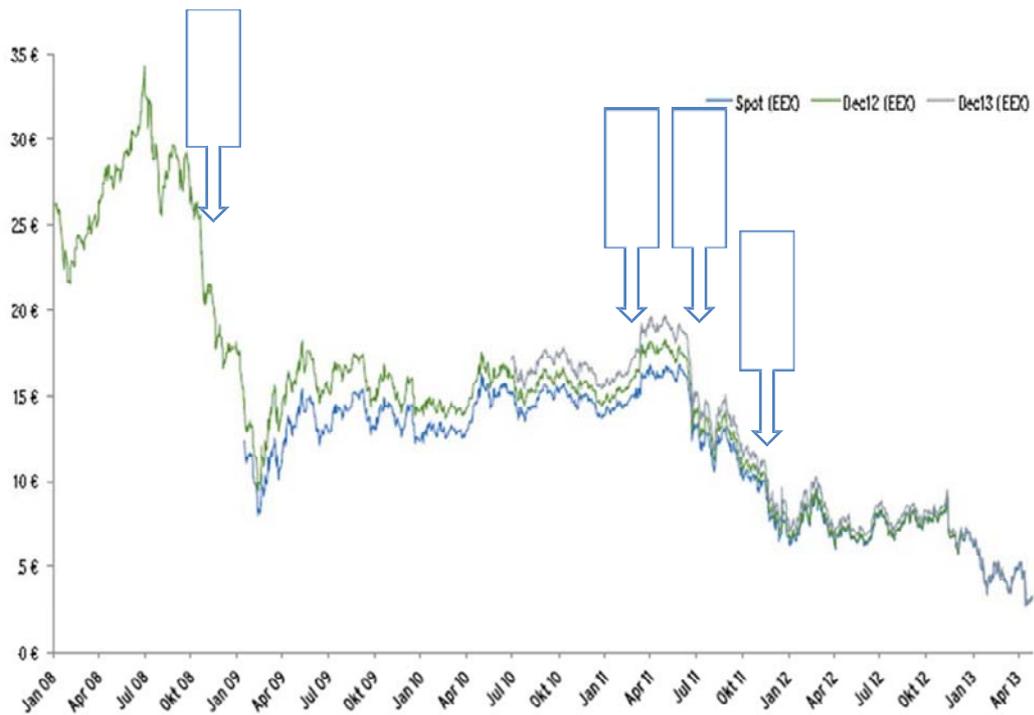
With regard to European emissions trading, there are three factors inherent to the system that have an impact on supply and demand and thus on the prices of emission allowances:

- The annual cap on the annual cap of allowances.
- The length of the trading periods and the possibility to transfer allowances to the next trading period.
- The rules governing the use of credits generated in connection with international climate protection projects in order to fulfil the requirement to surrender an adequate number of allowances to the responsible national body.

On the basis of these framework conditions, market participants try to assess current and future shortages and thus the prices of allowances. Figure 1 shows the development of prices for emission allowances from 2008 to the beginning of 2013. It shows that market participants anticipated an increasingly excessive supply of allowances for the second trading period (cf. 3.3 of this report).

Figure 1

### Evolution of prices of emission allowances



Explanation: The chart shows the daily price development at the European Energy Exchange (EEX) in Leipzig:  
 Spot (EEX): Spot transaction price with immediate settlement (trade beginning only in January 2009).  
 Dec12 (EEX): Forward transaction price due in December 2012.  
 Dec13 (EEX): Forward transaction price due in December 2013.

Source: German Federal Environment Agency, supplemented by the German SAI.

Figure 1 also indicates that factors not linked to the trading system may also significantly impact on the prices:

- Owing to the global financial and economic crisis, prices for allowances fell from €29.33 to €8.20 between autumn 2008 and spring 2009. The weak economic environment led to a drop in production. As a result, operators required fewer allowances (cf. arrow 1 in figure 1).
- Against the background of the nuclear catastrophe in the Japanese nuclear plant Fukushima Daiichi in March 2011 in the wake of a tsunami, the Federal Government decided to phase out nuclear power earlier than planned. As a result, prices for emission allowances increased in the short term because market participants expected that they would have to increase their use of fossil fuels (cf. arrow 2).

- In early summer 2011, the Commission published the draft of a revised energy efficiency directive, calling for a reduction in energy consumption by 20 per cent until 2020. Market participants expected a lower demand for emission allowances in the future. Among other factors, such expectations led to falling prices after mid-2011 (cf. arrow 3).
- With the crisis in the euro area<sup>6</sup> getting worse and the resulting adverse impact on the economic cycle, prices for emission allowances dropped sharply during the second half of 2011 (cf. arrow 4).

### 3.2 Revenues obtained by the Federal Government from emissions trading

The revenues from the sale of emission allowances in the primary market (cf. 2.3.2 of this report) accrue to the participating countries. The Federal Government estimates the expected revenues from emissions trading when drafting the budget, considering current price levels and analysts' estimates of future price developments. For example, analysts expected that the demand for allowances and thus their prices will continue to increase till the end of the second trading period. The main reasons given for these estimates were the shrinking supply of allowances after 2012 and the possibility to transfer allowances to the third trading period.

In 2008-2012, the Federal Government estimated total revenues at €3.9 billion. Actually, the total revenues from selling 238 million allowances totalled €3.2 billion (cf. table 3). Since 2012, the revenues have accrued to the Energy and Climate Fund. Only such part of the revenue that is needed to cover the costs incurred by the Federal Environment Agency in fulfilling its tasks linked to emissions trading is directly transferred to the federal budget.

<sup>6</sup> The euro area encompasses the EU Member States that introduced the Euro: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain.

Table 3

**Sale of emission allowances by the Federal Government in 2008-2012**

<b>Year:</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>Total</b>
<b>Millions of allowances sold</b>						
Basic volume						
Early auctioning from the third trading period and auctioning of aviation allowances	40	40	40	40	40	200
	-	-	-	-	26	26
Sale to finance costs incurred by Federal Environment Agency	1	1	1	1	8	12
Total number of allowances sold	41	41	41	41	74	238
<b>Price per allowance in euros:</b>						
Calculation at the time of budgeting	15.00	22.50	20.00	17.50	17.00	
Average sales price	23.16	13.22	14.36	13.81	7.32	
<b>Revenue of Federal Government in million euros:</b>						
Calculation at the time of budgeting	616	915	815	742	823	3,911
Annual Total of revenue <sup>a</sup>	948	541	589	561	542	3,181
<i>allocated to Federal Budget</i>	948	541	589	561	60	2,699
<i>allocated to Energy and Climate Fund</i>	-	-	-	-	482	482

Explanation: <sup>a</sup> Actual revenue is higher because sales expenses were deducted from revenue in advance.

Source: German SAI, own table. Table data are taken from audit findings.

In 2012, the Federal Government also sold 23.5 million allowances for fixed installations through auctions from the third trading period, obtaining revenues totalling €166 million contained in the sums presented in table 3. Already in July 2011, the European Union decided to sell 120 million emission allowances of the third trading period through auctions held by the participating countries in the last quarter of 2012. The aim was to have a smooth transition from one trading period to the next. In particular, energy producing companies would sell their products several years in advance and would hence acquire the necessary means of production such as raw materials and emission allowances in advance.

In contrast to expectations, the Federal Government did not sell 6 million aviation allowances through auctions in 2012 but only 2.5 million. The European Union had decided earlier to suspend emissions trading with regard to flights starting or ending outside the European Economic Area or in Switzerland. At present, the

European Union aims to bring about a global regulation for reducing greenhouse gas emissions from aviation.

Operators may deduct expenses incurred for the acquisition of allowances from tax. According to estimates of the Federal Ministry of Finance, revenues from emissions trading cause losses of tax revenues equivalent to some 30 per cent of the revenues from emissions trading.

### 3.3 Surplus of emission allowances

#### 3.3.1 Development of the supply of emission allowances

In summer 2012, the Commission published an analysis of the excessive supply of emission allowances in the past (cf. table 4).

Table 4

#### Surplus allowances across Europe in 2008-2011

Year:	2008	2009	2010	2011	Total
	in millions				
<b>Allowances:</b>					
Allowances from free allocation or sale by participating countries	1,994	2,024	2,070	2,084	8,171
Credits generated through internat. climate protection projects	82	81	134	252	549
Total of available allowances	2,076	2,105	2,204	2,336	8,720
<b>Reported emissions</b> (= used allowances)	2,100	1,860	1,919	1,886	7,765
<b>Surplus</b> of unused allowances	<sup>a</sup> -24	244	285	450	955

Explanation: <sup>a</sup> The Commission is of the opinion that operators used allowances that are allocated free of charge in 2009 to cover the shortage of allowances for 2008.

Source: Publication of the Commission (includes rounding differences).

In summer 2012, the Commission expected that

- the number of surplus allowances in 2012 will be at least as high as in 2011 (+450 million allowances);
- there will again be surplus allowances in 2013, however, the number will be lower than in the two years before; and
- there will be only a small number of surplus allowances after 2013.

In May 2013, the overall surplus of allowances totalled 2 billion at the end of the second trading period and thus was much higher than expected in summer 2012.

In Germany, the second trading period (2008-2012) showed an overall surplus of 250 million allowances (cf. table 5).

Table 5

**Surplus allowances in Germany for fixed installations in the second trading period**

Year:	2008	2009	2010	2011	2012	Total
	in millions					
Allowances:						
Free allocation by Federal Environment Agency	389	390	396	402	416	1,993
Sold by Federal Environment Agency via the Development Loan Corporation	41	41	41	41	<sup>a</sup> 48	212
Credits generated through internat. climate protection projects	24	27	38	74	140	303
Total of available allowances	454	458	475	517	604	2,508
Reported emissions (used allowances)	473	428	454	450	453	2,258
Surplus (unused allowances)	<sup>b</sup> -19	30	21	67	151	250

Explanation: <sup>a</sup> Including 7 million allowances auctioned to finance the costs incurred by the Federal German Environment Agency in the first trading period, but without the early auctioning for the third trading period and auctioning of aviation allowances (in total: 26 million allowances).

<sup>b</sup> Any shortage of allowances may be covered by the allowances allocated for 2009 or by purchasing allowances in other participating countries.

Source: German SAI, own table; Data source: Federal German Environment Agency.

### 3.3.2 Analysis of the European Commission

From the Commission's point of view, the surplus of emission allowances has the following reasons:

- The economic environment that remained static since 2011 curbed the increase in emissions and thus the demand for allowances (cf. arrow 4 in figure 1). The owners of allowances for the second trading period were permitted to exchange allowances that were no longer needed for new allowances at the beginning of the third trading period.
- In the second trading period a total of 1 billion credits generated through new international climate protection projects were used.
- In contrast to Germany (cf. 3.4 of this report), at least some participating countries sold allowances that were part of the national reserve during the second trading period and no longer needed in 2012.
- In 2012, 120 million allowances for fixed installations linked to the third trading period were auctioned at an early stage.
- In 2012 and 2013, the European Investment Bank was supposed to auction 300 million allowances out of the Europe-wide reserve for the third trading period.

The main reason given by the Commission for its expectation that the number of surplus allowances will decline after 2012 is that the cap on the number of emission allowances will decrease each year (cf. 2.3.4 of this report).

#### **The Commission's proposal**

As a result of its analysis, the Commission fears that the surplus of allowances will increasingly impact on the functioning of the emissions trading system. The Commission recommended that a share of the allowances to be auctioned in 2013-2015 should be auctioned only in 2016-2020. According to the Commission, the number of allowances to be auctioned at a later stage could be 1.2 billion, 900 million or 400 million allowances. In November 2012, the Commission made the proposal to defer the auctioning of 900 million allowances from the period 2013-2015 to 2019-2020 (cf. table 6).

Table 6

**Commission's proposal to defer the auctioning of  
emission allowances in the third trading period**

Year	2013	2014	2015	2016	2017	2018	2019	2020
Change of auction volume (in million allowances)	-400	-300	-200	0	0	0	+300	+600

Source: German SAI, own table. Data source: EU Commission.

In July 2013, the European Parliament endorsed the Commission's proposal to defer auctioning, making however some amendments. The Commission may postpone the auctioning of up to 900 million allowances only once and in exceptional circumstances during the third trading period, provided that such deferrals have no impact on individual industrial sectors or sub-sectors that are exposed to a significant risk that production sites will be relocated. In December 2013, the European Parliament and the Council of the European Union agreed to a corresponding amendment of the Emissions Trading Regulation.

According to the Commission, the problem of surplus allowances will not be completely solved by postponing the auctioning of allowances. Therefore, it proposed, in January 2014, to introduce a so-called Market Stability Reserve at the beginning of the fourth trading period in 2021. By introducing this reserve, the number of allowances offered for auctioning may be automatically adjusted upwards or downwards on the basis of rules laid down in advance. This would enhance system resilience against market shocks as well as market stability. The measure does not aim at controlling supply on the basis of individual cases.<sup>7</sup>

### 3.3.3 Stance of the Federal Government

The Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety that has the lead responsibility in matters of emissions trading supports the Commission's proposal to postpone the auctioning of allowances within the third trading period. Since there is no shortage of allowances, emissions trading may not properly work as leading market-based climate protection instrument. Without effective emissions trading it cannot be ensured that the

<sup>7</sup> Commission Communication to the European Parliament and other bodies as of 22 January 2014: A Policy Framework For Climate and Energy in the Period from 2020 to 2030, COM (2014) 15 final, chapter 2.4 Reform of the emissions trading system.

national carbon dioxide emissions reduction goal of 40 per cent until 2020 compared to the base year 1990 is reached. Moreover, the funding of major climate protection programmes is no longer assured. Even the deletion of 1.4 billion allowances until 2020 would be possible without a significant adverse impact on German industry because the method of allocating allowances free of charge would be continued and 600 million surplus allowances would remain in the market.

By contrast, the Federal Ministry for Economic Affairs and Energy generally rejected the Commission's proposal to postpone auctioning allowances, arguing that such an intervention motivated by environmental concerns in a market-based instrument would lead to uncertainty among investors and that the emissions trading system and other policy measures constituted reliable framework conditions promoting energy efficiency and an increased use of renewable energy resources. The Economics Ministry added that such measures also caused costs for energy consumers (e.g. costs of insulating buildings or purchasing energy-efficient appliances) and that the currently low price level of emission allowances due to the financial and economic crisis is inherent in the system and offers companies room for recovery. Furthermore, the impact of the planned deferral on the price of allowances is quite doubtful because all allowances will be brought to market again at the end of the third trading period. According to the Economics Ministry, the temporary shortage may even lead to revenue losses if the expected price increases do not occur. In order to increase the revenues obtained by the Federal Government from emissions trading, the price level increases need to be so significant that they could compensate revenue losses from lower sales volume. The development of price levels is contingent upon the action taken by market participants. If they decide not to invest in Europe due to higher price levels, this could lead to a decreasing demand for allowances and falling prices. But, generally speaking, emissions trading is no funding instrument.

In addition, the Federal Ministry for Economic Affairs and Energy expressed a strong opposition to a permanent shortage of allowances. At the end of the day, this would mean a unilateral tightening of the European Union's climate policy, with no international climate protection agreement in sight. Companies producing in Germany should be subject to fair conditions of competition on the European and global market; otherwise, energy-intensive production may be moved to other regions of the world.

Until November 2013, the Federal Government was not able to present a coordinated position at the Council of the European Union due to the diverse views of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety and the Federal Ministry for Economic Affairs and Energy respectively.

In their coalition agreement, the political parties forming the new Federal Government stipulated that the emissions trading system should only be changed if emission reduction goals are not reached. With regard to the planned postponement of auctioning 900 million allowances, it must be ensured that this will be a one-time intervention, that allowances will not be permanently removed from the market and that an adverse impact on the competitiveness of affected sectors and industrial jobs is ruled out.

Meanwhile, the Federal Government approved the deferral of auctioning allowances within the 2013-2020 trading period. As initial responses demonstrated, the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety and the Federal Ministry for Economic Affairs and Energy have welcomed in principle the Commission's proposal to establish a market stability reserve in the fourth trading period after 2020.

#### **3.4 Revenues obtained by the Federal Government from the national reserve**

In the second trading period, participating countries assigned a certain share of allocable allowances to the national reserve, for example, to have allowances at hand that can be allocated free of charge to new installations established during the year.

##### **Financing of system costs with means from the national reserve**

Participating countries incur costs by operating the European emissions trading system. Such costs that are caused by establishing the trading system as well as carrying out and developing emissions trading are called system costs. In Germany, the initial plan was that organising the emissions trading system should not lead to additional costs for public bodies. In the first and second trading period, expenses incurred by the Federal Government in running the German emissions trading body which is part of the Federal German Environment Agency were covered, if not by fees, then by selling allowances taken from the national reserve. All in all, the Federal Environment Agency's revenue amounted to €72

million in the second trading period. In the third trading period beginning 2013, the Federal Government will not auction a defined number of allowances any more but will finance system costs from the total revenues generated by auctioning allowances allocated by the Commission.

### **Potential additional revenues from the national reserve**

As far as participating countries were allowed to sell allowances after the second trading period they had to do so no later than 30 April 2013.

In January 2013, the German reserve totalled 37.5 million allowances. Observing Community law requirements, the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety presumed an auctioning volume of 5.7 million allowances. In February 2013, the Federal Government expected that auctioning a small share of allowances would not be likely to have any significant impact on the prices of emission allowances.

In early April 2013, the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, having the lead responsibility with regard to emissions trading, suggested to the Federal Ministry of Finance and the Federal Ministry for Economic Affairs and Energy not to sell the allowances. In doing so, the Federal Government could demonstrate that it wishes to curb a further increase of surplus allowances. Moreover, selling allowances would adversely impact price levels in the third trading period and thus further deteriorate the revenues of the Energy and Climate Fund. According to the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, the revenues gained from auctioning allowances will amount to less than €30 million if prices remained robust in spite of auctioning activities. The Federal Government was not able to agree on a coordinated position by the end of the deadline. While the Federal Ministry of Finance supported the arguments of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, the Federal Ministry for Economic Affairs and Energy insisted on selling allowances in order to secure the revenue levels of the Energy and Climate Fund. Due to this disagreement, the Federal Government did not auction emission allowances and these expired unused.

In mid-April 2013, the European Parliament rejected the Commission's proposal to postpone the planned auctioning of 900 million allowances in 2013-2015 in order to reduce excess supply in the market. Once the proposal was rejected, the price of allowances fell below €3. Both the Federal Ministry for the Environment,

Nature Conservation, Building and Nuclear Safety and the Federal Ministry of Finance state that, also in retrospect, it was right in the given situation that they refused to sell the reserve. A sale could have been seen as a “political signal” for an aggravation of the excess supply situation.

However, in early 2013, two other participating countries auctioned allowances from their national reserve in the market. Their revenues totalled €6.4 million (9.6 million allowances) and €5.8 million (1.6 million allowances) respectively.

#### **4 Revenues of the Energy and Climate Fund**

The Federal Government intends to implement its energy programme also by means of the off-budget federal entity “Energy and Climate Fund”, which was established by law in early 2011, and to fund additional measures aiming at climate protection at national and international level by this means. The Federal Ministry of Finance has the lead responsibility for the Energy and Climate Fund. The Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety manages the revenues generated by the Energy and Climate Fund from emissions trading. Expenses incurred in implementing the various measures are paid by the Federal Ministries out of the Energy and Climate Fund. Even prior to establishing this extra-budgetary fund, the federal budget stipulated that two thirds of the expected revenues from emissions trading are to be used to cover additional costs caused by national and international climate protection measures. For the period 2008-2011, the Federal Government expected revenues of €3.1 billion. However, actual amounts, which accrued to the federal budget, totalled €2.6 billion in that period.

Initially, revenues obtained in connection with the extension of the operating life of nuclear power stations were to accrue to the Energy and Climate Fund. In the wake of the nuclear catastrophe in the Japanese nuclear plant Fukushima Daiichi in March 2011, the Federal Government decided to revoke the lifetime extensions of existing nuclear power plants. As a result, expected revenues for the Energy and Climate Fund fail to materialise. Instead, the revenues from emissions trading have been allocated to the Energy and Climate Fund since 2012.

The Federal Ministry of Finance is of the opinion that the separate recognition of additional expenses for implementing the energy programme in the Energy and Climate Fund ensures a high level of transparency, particularly with regard to the

use of revenues from emissions trading and the impact on the federal budget caused by the change in energy policy. Apart from this, the Energy and Climate Fund also has an effective budget control function. Changes of revenue could directly be linked to corresponding adjustments in terms of expenses. Due to the budgetary principle of universality, such targeted control function could hardly be implemented or enforced in the federal budget. Furthermore, the Energy and Climate Fund has an effective grouping function. Such function is the basis for much better interdepartmental cooperation in preparing and especially in managing the budget and thus an efficient channelling of available budget funds into prioritized fields.

The Energy and Climate Fund is supposed to support challenging efficiency-oriented measures implemented by private sector bodies, the craft industry as well as small and medium-sized enterprises, municipalities and households. This intention was laid down in the coalition agreement of December 2013. The Ministries responsible are to also finance measures taken with regard to buildings and traffic by means of separate instruments.

### **Financial situation of the Energy and Climate Fund in 2012**

In 2012, revenues generated by the Energy and Climate Fund from emissions trading were expected to amount to €780 million. This estimate was based upon the planned auctioning of 46 million allowances at a price of €17 per allowance.

In spring 2012, the Federal Ministry of Finance adjusted its forecast with a decreased price of €7.50 per allowance and thus lower revenues totalling €345 million. Taking into account the Energy and Climate Fund's €29 million reserve from the previous year and a planned liquidity loan of €78 million, the Federal Ministry of Finance assigned €452 million to the federal ministries having the right to use resources of the Energy and Climate Fund.

In aggregate, the Energy and Climate Fund received some €482 million throughout the year from selling allowances at an average price of €7.32. Revenues increased because the Federal Government auctioned 66 million allowances rather than the planned 46 million. The increase was due to the Commission's decision to auction a share of the allowances of the third trading period already in 2012 (cf. 3.2 of this report). The expenses incurred by the federal ministries amounted to €317 million. The Energy and Climate Fund's reserve increased to a total of €195 million.

### **Financial situation of the Energy and Climate Fund in 2013**

In 2013, revenues generated by the Energy and Climate Fund from emissions trading were expected to amount to €2 billion. Due to the beginning of the third trading period, this calculation was based upon a significantly increased number of allowances to be auctioned (206 million allowances). The Federal Government expected an average price of €10 per allowance.

In spring 2013, the Federal Ministry of Finance adjusted its forecast with a decreased price of €4.50 per allowance. Therefore, the Finance Ministry only assigned €1.1 billion (53 per cent of the respective budget estimates) to the relevant line ministries. In addition, the German Development Loan Corporation stated it would waive the reimbursement of expenses totalling €311 million to which it was entitled with regard to individual programmes of the Energy and Climate Fund.<sup>8</sup>

For further information about other potential revenues of the Federal Government from the additional auctioning of allowances taken from the national reserve please refer to item 3.4 of this report.

### **Financial situation of the Energy and Climate Fund after 2014**

The first draft of the 2014 separate budget set up for the Energy and Climate Fund estimated the revenues from emissions trading at €25 million. The Federal Government based its estimate on a price of €4.50 per allowance.

Since the revenues from emissions trading are not sufficient to cover expected expenses of the Energy and Climate Fund, the Federal Government intends to support the Energy and Climate Fund with an annual grant to be taken from the general federal budget. In order to be able to finance expected expenses of €1.6 billion, the Federal Government included a grant of €655 million in the first draft of the federal budget for 2014. With regard to the years after 2014, financial planning for the Energy and Climate Fund was based upon the assumption that two thirds of the funds needed by the Energy and Climate Fund are to be financed

8

According to the Federal Ministry of Finance, the actual amount assumed by the German Development Loan Corporation amounted to some €264 million due to late payments in the programmes concerned.

by revenues from emissions trading and one third by grants awarded from the federal budget.<sup>9</sup>

In preparing the first draft budget for 2014, the Federal Government also decided to relieve the Energy and Climate Fund by including expenses incurred in connection with international climate protection in the federal budget after 2013; such Energy and Climate Fund expenses amounted to €372 million in 2013.

## 5 Evaluation by the German SAI

In general, the German SAI considers emissions trading an appropriate means to reduce greenhouse gas emissions. As a quantitative economic instrument (cf. 2.2 of this report), emissions trading directly aims at achieving this climate policy objective. However, it is not an instrument that may be used to reliably generate revenues to be used to co-finance the change in energy policy as well as climate protection activities.

Further information:

The European emissions trading scheme may be characterized as follows:

- The supply of allowances is not determined by market participants alone but to a considerable extent also by the cap that is defined by the Federal Government. Such cap is defined for the given trading period in advance. It is set on the basis of economic considerations; this means that, with regard to the second trading period, the conditions prevailing in 2012 had to be forecast already in 2006. Afterwards, it became apparent that the cap defined for the period 2008-2012 was too high because the demand for allowances was lower than expected also due to the financial and economic crisis.
- Emissions trading is to a considerable extent contingent upon the economic trend in participating countries. Moreover, due to reasons connected with climate and industrial policies, allowances will also in future be allocated free of charge to certain operators so that emissions will not increase in non-participating countries.

<sup>9</sup> The German Parliament did not adopt the corresponding draft law to amend the existing Energy and Climate Fund Act in the 17th legislative period so that there is yet no statutory commitment authorisation for this grant in force.

- The transferability of allowances, the present excess supply and low market prices may facilitate speculation in connection with emissions trading. Particularly, owners of surplus allowances that were allocated free of charge could speculate on future price increases without any financial risk.
- The possibility to use credits generated in connection with international climate protection projects for fulfilling the requirement to surrender an adequate number of allowances to the responsible national body considerably contributed to increasing the supply of allowances in the second trading period.

So far, the lessons learnt in emissions trading show that its extraordinary design as well as external factors influencing the trade significantly impact on its effectiveness and the prices of allowances. The present report did not analyse in detail the environmental, economic and energy policy-related impact of alternative options. Such analysis is to be conducted by the Federal Government when it prepares its next climate policy decisions. Nevertheless, the German SAI identified certain fields in which the Federal Government needs to take action soon; the German SAI reports on such fields in the present document. The German SAI's findings might be useful and support the Federal Government in triggering certain developments in emissions trading and responding more quickly to new developments.

### **European and national climate protection goals**

At present, European climate protection goals are far less ambitious as the goals established by the Federal Government. With regard to the European emissions trading scheme, however, the European climate protection goals are applicable. In the third trading period, the number of allocated allowances is to be determined by the European Union. The Federal Government is involved in such decisions but its power to use emissions trading to implement stricter national climate protection goals has decreased considerably.

The European emissions trading scheme covers less than half of the greenhouse gas emissions within the European Union. As a consequence, additional measures need to be taken at European level to reduce emissions more comprehensively, such as the use of instruments to promote energy efficiency or renewable energy. Such instruments may also be used to achieve objectives other than the reduction

in greenhouse gas emissions (e.g. ensuring a secure energy supply based on renewable energy).

The Federal Government's aim to reduce greenhouse gas emissions at national level by at least 40 per cent compared to the base year 1990 by 2020 covers sectors both within and outside the scope of the European emissions trading scheme.

In particular, the European Union will use the emissions trading scheme as an instrument to implement European climate protection goals. Emissions trading would then no longer be a vehicle to implement stricter national climate protection goals. The German SAI holds that the Federal Government will have to rely on measures outside the scope of the European emissions trading scheme if it intends to implement stricter climate protection goals at national level.

### **Effectiveness of the trading system**

The German SAI sees a significant discrepancy between the Federal Government's very long-term decisions on the supply of allowances and the market's very short-term responses to current developments. The Europe-wide annual cap on the number of allowances was determined in 2009, i.e. at a time in which it was not foreseeable that the crisis in the euro area would get deeper and the economic environment would deteriorate. The crisis considerably impacted on the demand for allowances. Moreover, the German SAI doubts whether the reasons for the decision made in 2010, namely to auction 120 million allowances of the third trading period already in 2012, were still substantial at the time of auctioning given the surplus of almost 1 billion allowances at that time.

The German SAI is of the opinion that – apart from the cap on the number of allowances for the second trading period that, in retrospect, was too generous – the surplus was caused by the wide-ranging possibilities to use external credits. At European level, such credits account for more than half of the surplus. In addition, the Europe-wide surplus is also caused by the participating countries allocating more allowances than needed by operators. In Germany, the aggregate number of credits is significantly higher than the annual surplus in the second trading period (cf. table 5). However, the future eligibility of external credits has already been limited considerably.

The proposed deferral of the auctioning of allowances would be far from being sufficient to respond to the surplus. Currently, the provisional waiver to auction

200-400 million allowances per year is to be seen in the context of a surplus that, according to the Commission, amounts to 2 billion allowances. The number of surplus allowances would be enough to cover annual emissions in Europe. The German SAI does not expect that a solution for the existing market imbalance will be found. Though for different reasons, not only the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety and the Federal Ministry for Economic Affairs and Energy had doubts that the effect would be sustainable. Even recently, the Commission acknowledged that such deferral might not be an effective solution in the long-run.

The answer to the question whether the market stability reserve proposed by the Commission for the time after 2020 is a suitable instrument to protect emissions trading against external factors such as economic impacts will, for the most part, depend on the design of the steering mechanism.

Certain changes to the European emissions trading scheme could contribute to reducing greenhouse gas emissions. Such changes may include:

- tightening the criteria for the determination of the Europe-wide cap;
- expanding the scope of emissions trading; and
- further reducing the number of allowances that are allocated free of charge.

The German SAI recommends considering the suitability of such options. The German SAI knows that such changes may have an adverse effect on the economy and is aware of the fact that the Federal Ministry for Economic Affairs and Energy rejects such options. However, the German SAI considers it important to examine whether the dependence on economic fluctuations may be reduced and unwanted interaction with other climate protection instruments may be avoided by means of such changes in the trading system. It must also be ensured that adequate incentives are available to encourage companies to invest in emission-reduced technologies rather than using allowances that were allocated free of charge to speculate on future price increases.

With regard to environmental and economic aspects, the Federal Government will have to consider the potential advantages and disadvantages.

### **Impact of political signals on emissions trading**

Not only legislative changes but mere expectations of market participants may have an impact on price levels. For example in mid-2011, prices for emission

allowances fell in the wake of the publication of the draft of a revised energy efficiency directive (cf. arrow 3 in figure 1). When in mid-April 2013 the European Parliament rejected the Commission's proposals aiming at a reduction of the number of excess allowances, the price of emission allowances even fell steeply. In April 2013, the Federal Government did not have a coordinated position with regard to the Commission's proposals aiming at reducing the number of excess allowances by postponing the auctioning of some 900 million allowances. The German SAI is convinced that the agreement within the Federal Government on emissions trading objectives and measures has a significant impact not only on the market place and thus on price levels. Since emissions trading is subject to decision-making at EU-level, the implementation of Germany's climate protection goals will considerably depend on how successful the Federal Government will be in asserting its position within the European Union.

In contrast to the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety and the Federal Ministry of Finance, the German SAI therefore believes that, from a policy point of view, not selling 5.7 million allowances from the national reserve had no effect at all (cf. 3.4 of this report). This very small number of allowances (compared to the proposed deferral of auctioning 900 million allowances) expired unused due to the evident disagreement within the Federal Government – and not due to any activity on its part. In this context it is not important to know whether the sale at the then current price would have resulted in revenues of some €15 million. Moreover, market participants knew that the Federal Government has the right to sell (a certain share of) this reserve as applicable legal provisions governing emissions trading provided for such right and other countries had already auctioned allowances taken from the national reserve at that time. According to the German SAI, the Federal Government should have sold such allowances and should have generated revenues for the Energy and Climate Fund, taking regard to Art. 34 (1) Federal Budget Code.

### **Revenues generated by the Energy and Climate Fund**

Earmarking revenues for individual expenditure areas contradicts the principle that all revenues shall cover all expenditures (principle of universality, Art. 8 Federal Budget Code). Any other practices need to be stipulated by law – such as the statutory provisions governing the establishment of the Energy and Climate

Fund with regard to its revenues from emissions trading. The aim of the principle is not only to prevent the Federal Government from incurring expenditures just to use earmarked revenues but also to ensure that expenditures having a financial or political impact may be incurred irrespective of generating a certain type of revenue. Where the Federal Government wishes, by way of exception, to finance certain activities from earmarked revenues, this only makes sense, according to the German SAI, if the Federal Government is in the position to calculate the amount of such revenue with a sufficient degree of accuracy. Otherwise, implementation of such activities would hinge on generating this certain type of revenue.

The 2008-2012 trading period showed that the expected amount of revenues from emissions trading cannot be forecast. In 2008, revenues were considerably higher than expected; in 2009-2012, however, revenues were considerably below expected amounts (cf. table 3 under item 3.2 of this report). Revenues from emissions trading in the current third trading period can hardly be estimated.

The impact of measures against the current crisis of emissions trading on future revenues of the Federal Government can also not be forecast. It is difficult to estimate whether the revenues from auctioning allowances will increase again, e.g. due to the proposed deferrals of auctioning activities. The development of price levels is contingent upon the response of market participants. If e.g. the reduction in the number of allowances only results in a slight price increase, with a significantly lower auction volume, it is possible that the revenues of the Federal Government will even continue to shrink. Even if the Federal Government ensures that the Energy and Climate Fund's expenditures are partly funded by a grant from the federal budget, the revenues from emissions trading will still –as planned– be the Energy and Climate Fund's most important source of income.

The Energy and Climate Fund also does not disclose the additional costs of energy transition and climate protection in a transparent manner. After 2013, additional measures of international climate protection are to be financed from the federal budget. In addition, the coalition agreement between the parties forming the new Federal Government stipulates that certain steps taken in implementing the energy transition process are not only to be financed from the Energy and Climate Fund but also from the general Federal Budget.

These developments were quite unknown at the time of establishing the Energy and Climate Fund. With regard to the now evident and probably long-lasting

uncertainties of emissions trading, the German SAI recommends that the revenues from emissions trading be included (again) in the Federal Budget. Hence, the Energy and Climate Fund should be wound up and its expenditure be included in the Federal Budget.

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Kranz

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Baraitaru