



Federal Ministry
for Economic Affairs
and Energy



Energiewende
direkt

07 Aug 2017



Minister Zypries: "Reform of grid fees reduces regional disparities"



By passing legislation on adjusting grid fees and promoting landlord-to-tenant electricity supply, the Federal government has implemented two important energy

Minister Zypries: "Reform of grid fees reduces regional disparities"

By passing legislation on adjusting grid fees and promoting landlord-to-tenant electricity supply, the Federal government has implemented two important energy policy projects.



“If we want the energy transition to work, we need a rapid expansion of the grid. A fair distribution of the costs across the whole of society is crucial for this project to meet with public acceptance”, the Minister said, summing up the purpose of the [Act on the Modernisation of the Grid Fee Structure \(NEMoG\)](#) following its adoption by the Bundestag. Now that the new Act has also been given the green light by the Bundesrat, it will enter into force in the next few days. A few days ago, the Act on the Promotion of Landlord-to-Tenant Electricity Supply entered into force. This Act aims to ensure that tenants can better share in the benefits of the energy transition. In the following section, we will bring you up to speed on the most important changes set out in the two new laws.

Aligning transmission grid fees across Germany by 2023

Today, grid fees vary widely across Germany. In order to remedy this situation, they will be aligned in several stages. Grid fees are payments that utilities make to grid operators so they can use the grids (more information on this can be found in our [‘direkt account’](#) section). Transmission grid fees will be aligned across Germany by 2023. This will happen in several steps, the first of which will be taken in 2019 as provided for by the new Act. From 2023 onwards, everyone in Germany – irrespective of where they live – is to be charged at the same level. This adjustment process means that fees for using the northern and eastern parts of the grid will fall by more than 20 per cent compared with current levels.

Reform of ‘avoided grid fees’ will bring down costs

The Act also sets out new rules for ‘avoided grid fees’. The term ‘avoided grid fees’ is used to describe payments made to operators of decentralised electricity installations such as wind farms. These payments are financed using the grid fees that consumers pay as part of their electricity bill (more on this can be found in our [‘direkt insights’](#) section). Avoided grid fees are one of the reasons why the level of grid fees varies from one German region to another. In some regions, avoided grid fees account for up to 20 per cent of the total grid fees, while in others it is considerably less (with the national average being around 10 per cent). The partial elimination of the payments set out in the new Act benefits all consumers of electricity alike: households, businesses and industry.

For existing installations, the new rules mean that from 2018, payments will be frozen at the 2016 level. As grid fees are being reduced further, the Act distinguishes between volatile generation facilities – which are difficult to control (such as wind turbines and solar installations) – and those which are easy to control (such as combined heat and power stations). This means that from 2018, new volatile installations will no longer receive any ‘avoided grid fee’ payments. Existing volatile installations will see their payments reduced to zero in three stages up until 2020. Payments for controllable installations will be stopped in 2023, if they are connected to the grid after this date.

Providing tenants with electricity from solar rooftop installations

The second law that was recently adopted will ensure that tenants can better share in the benefits of the energy transition. Just like homeowners, they are to benefit from solar electricity generated on the rooftop of the building they live in. Landlords who offer their tenants electricity from new solar installations will be paid the ‘landlord-to-tenant supply premium’, which will make the system more profitable for them. The Act therefore provides a fresh boost for expanding solar power capacity. A

study conducted on behalf of the Federal Ministry for Economic Affairs and Energy has found that up to 3.8 million households could benefit from landlord-to-tenant electricity supply.

FURTHER INFORMATION

[↪ Controlling grid fees](#)

What exactly are grid fees?

Does electricity need a ticket to travel from the place it is being generated to the consumer? This statement, although it may sound odd, is not that far-fetched from reality. In the following section, we will explain to you why.



This is what it's all about: paying for using the grid and therefore making sure that it can be maintained and expanded

If you want to board a train in the city you live in, you first need to buy a ticket. This money is used for operating the German railway system – train drivers need to be paid, trains bought and repaired, operations managed, and, most importantly, the railway network built and maintained. Where a train ticket pays for keeping the railway running, grid fees pay for maintaining the grid. In order to transport electricity from the place it is generated on to consumers, it needs to pass through the grid. And using the grid comes at a price: the grid fee.

Operating and expanding the grid needs to be paid for

The German grid is made up of many, often locally organised distribution grids and trans-regional transmission grids. The transmission grid is divided into four parts, each of which is operated by a

different transmission system operator. TenneT and 50Hertz cover the northern and eastern parts of the country, while Amprion und TransnetBW manage the western and southwestern parts of the transmission grid. The four transmission grid operators and the around 900 operators of the local distribution grids are responsible for ensuring that the grid is managed and expanded in a safe and reliable manner. Part of the costs incurred by the operators for managing and expanding the grid can be passed on to the utilities that use the grid for transporting electricity to consumers. Utilities in turn pass on the costs to consumers – which they will find included in the grid fee billed per kilowatt-hour on their electricity bill.

Distributing grid fees more fairly

In 2016, the average grid fee for private consumers was 6.71 cents per kilowatt-hour. However, grid fees vary widely across regions, depending on the level of utilisation of the grid, age and quality of the power lines and many other factors.

The fact that grid fees currently vary across regions can be understood more easily by using the following example: if green electricity from the large number of wind turbines installed in the north of Germany is to be fed into the grid, it is particularly important to expand regional grids. The costs incurred for this by the grid operators in these regions are then passed on to consumers via the grid fee. This is why the fees in these regions, for example in Schleswig-Holstein and Mecklenburg-Western Pomerania, are particularly high. However, the electricity generated in these regions is not consumed only there, but is also transported on to the western and southern parts of the country that urgently need it. It is therefore unfair to ask people in the north of Germany to pay more for the expansion of the grid than people living in the west or south of Germany. This is where the Act on the Modernisation of the Grid Fee Structure (NEMoG) comes in. It provides that grid fees will be aligned in several stages, so that by 2023, grid fees will be the same everywhere across Germany (to find more about NEMoG, please click [here](#)).

Avoided grid fees

NEMoG also brings another significant change. Anyone feeding electricity into the local distribution grid currently receives a payment, also called ‘avoided grid fee’. The government introduced avoided grid fees back in 2005, thinking that if electricity was generated locally this would help avoid grid expansion costs. The idea was that electricity that was generated locally would be consumed locally, thus eliminating the need for using trans-regional transmission grids. However, it turned out that electricity that is generated locally is not always consumed locally, but often has to be transported via the trans-regional transmission grid to reach consumers. This means that volatile renewables such as solar and wind power do not help eliminate the need for grid expansion; on the contrary, they create the need for it. It is against this backdrop that the government decided to reform the avoided grid fee scheme (please click here to find out [more](#)).

Introducing clear rules for grid fees

Grid operators are not allowed to set their grid fees arbitrarily. The government has set out clear rules for how grid fees are to be calculated – rules that are enforced by the Bundesnetzagentur (the federal regulatory authority in charge of the energy market) and the regulatory authorities of the German Länder. The proceeds that grid operators receive from grid fees must not exceed a certain limit. The method for calculating this limit is sophisticated and takes into account a wide range of different

factors; for example grid operators will be rewarded for working particularly efficiently. You can find out more about this limit [here](#).

FURTHER INFORMATION

[\[→ Controlling grid fees\]](#)

Power, heat, transport: do we need to levy a carbon charge across all sectors if we want the energy transition to succeed?

Read the answers provided by Börn Klusmann, Managing Director of Forum Ökologisch-Soziale Marktwirtschaft (FÖS), a think tank for a green social market economy, and by Matthias Hartung, CEO of the German Lignite Industry Association (DEBRIV).

MORE INFORMATION:

If you want to learn more about blockchain technology and how it works, go to our [direct account](#) section.

PRO: BJÖRN KLUSMANN



© TenneT

The success of the energy transition is compromised by low carbon dioxide prices and subsidies for fossil fuels. They counteract all efforts made to achieve the defined goals. The reason for this can be found in fiscal policy: unless carbon emissions come at a meaningful cost, there are few rational and economic incentives to avoid causing these emissions. In fact, companies that do protect the environment are put at a disadvantage.

In the absence of meaningful carbon prices, there will be no fair competition nor will the energy transition be successful. The European emissions trading system will not be able to create sufficient incentives for investments in climate-

friendly technologies in the foreseeable future. A carbon price has the potential to create a reliable and stable financial incentive for decarbonising our economy and our society.

Existing taxes on energy are the result of a long tradition. The existing taxes in the energy sector have grown historically but are not oriented towards the purpose of the energy transition. These taxes do not follow an overall systematic approach and, what is worse, the many exemptions they provide for individual industries and use cases have an effect on taxpayer's behaviour that can go as far as creating false incentives to the detriment of the climate and against sector coupling. These taxes need reforming, in a way that establishes consistent carbon prices across the power, heat, and transport sectors. Tax rates ought to be designed to reflect the energy content and carbon intensity of technologies. The energy tax rate could still vary between different sectors so as to take account of specific financing needs and additional costs payable for harmful effects other than those on the climate, such as air pollution or transport infrastructure. Taxing the energy content can also create incentives for greater efficiency where zero-carbon energy sources are concerned. It is crucial that all forms of energy must become subject to a uniform tax on carbon: we recommend that the tax rate be

initially fixed at €30 per tonne of carbon and then be incrementally raised to reflect the costs on the climate. Under this scheme, the competitiveness of the various energy sources would depend first and foremost on the effect they have on the climate. This would bring the tax system in line with objectives of the Paris Agreement.

Björn Klusmann is managing director of the Green Budget Germany think tank.

AGAINST: MATTHIAS HARTUNG



What we need above all is a broader view of the architecture of climate protection and its instruments. I believe this involves the three following elements:

1. An offensive that promotes innovation and technology

This will provide incentives across all sectors to advance low-carbon technologies – for the energy sector as well as for industry, transportation and the entire building sector. My plea is for seed money and against permanent subsidies. The sooner innovative technologies become marketable and competitive, the better. Such an offensive could create prospects in all areas – and thus strengthen Germany as a

hotbed instead of hollowing it out.

2. Reliable reduction paths for all sectors

Undisputedly, we intend to achieve the European reduction goals. Clear, realistic targets enable reliable planning and prevent structural upheaval in industries and regions. The electricity sector has the European Emissions Trading System. This comprehensive scheme works and encompasses a strategy, a reduction path and a tool. The key factor is the cap, which steadily lowers the level of allowable emissions. It is the cap that guarantees that the goals are achieved – not the price of carbon dioxide.

3. An umbrella strategy with a holistic view

We are en route to becoming ‘all-electric society’, with electricity being the main fuel. To achieve this, the use of electricity in further sectors must become competitive. Creating a tool to accomplish this is up to policymakers. One option could be to readjust the tax and levy system. The approach here could be to figure out how to maximise carbon reductions with as little capital as possible. This will bring movement into the tried-and-tested triangle of energy policy objectives consisting of security of supply, economic feasibility and environmental compatibility.

Conclusion: Placing all one’s chips on regulatory instruments such as a predetermined carbon price falls short of the mark. Instead, we should seize the technological innovative opportunities to help make the energy transition a success and gain acceptance.

Matthias Hartung is CEO of the German Lignite Industry Association (DEBRIV).

The Kazakh energy transition: German expertise for the green economy

Germany and Kazakhstan want to engage in greater cooperation on the energy transition. What exactly this cooperation might look like was the subject of the German Energy Dialogue, which was held at EXPO 2017 in the country's capital Astana.



© Hamburg Messe und Congress, German Pavilion / HMC

Building renewables capacity and improving energy efficiency. Germany is not the only country to have put these two objectives at the top of its political agenda. The government of Kazakhstan in Central Asia also wants to place a greater focus on clean energy and on energy efficiency. This creates interesting market opportunities for German companies whose expertise around the energy transition is in global demand.

The exact nature of this potential new cooperation between the two nations was discussed between the approx. 200 representatives from government, business and science that attended the German Energy Dialogue. This event, which took place in mid-July, was hosted by the German Energy Agency, which has long been promoting bilateral cooperation on energy between the two countries. The German Energy Dialogue took place in the Kazakh capital of Astana, which is currently hosting EXPO 2017. The motto of the world exposition, which is open for visitors until 10 September, is 'Future Energy: Action for Global Sustainability'.

Working together for greater success

The German Energy Dialogue was opened by Mr Uwe Beckmeyer, Parliamentary State Secretary at the Federal Ministry for Economic Affairs and Energy. Speaking before the event, Mr Beckmeyer highlighted the positive relations between Germany and Kazakhstan: "Kazakhstan is an important partner for Germany in the region of Central Asia. This particularly applies to the energy sector. The

fact that Kazakhstan has decided to put the objective of a sustainable future energy supply at the centre of EXPO 2017 highlights just how much potential there is for us to extend and strengthen our cooperation on energy. Germany has a lot to offer in this field.”

At the German Energy Dialogue, experts from Germany and Kazakhstan discussed not only energy efficiency and renewables, but also other issues, including how to best modernise the energy infrastructure, build sustainable cities, and modernise buildings to make them more energy efficient.

Outcomes of German-Kazakh cooperation

The cooperation underway between the German Energy Agency and its Kazakh partners has already delivered some specific outcomes. These include the publication of a brochure, which was presented at the conference and gives an overview of energy-efficient all-purpose technologies for industrial and commercial companies. This brochure is targeted at industrial companies in Kazakhstan. Furthermore, the German Energy Agency has renewed an existing agreement with the Kazakh Ministry for Investment and Development to engage in joint projects in fields including Industrie 4.0, digitisation of the energy transition, and distributed energy supply from renewables.

Harnessing the potential for energy conservation

Kazakh companies use four times as much energy per value unit as German ones. This means that there is enormous potential for energy conservation. For several years now, the President of Kazakhstan, Mr Nursultan Nazarbayev, has been promoting the green economy, i.e. a sustainable plan for modernising his country’s economy. As part of this process, Kazakhstan has been seeking international cooperation and has opened up its market for investors and partners from all over the world.

The German Energy Agency has been actively working with Kazakhstan for several years now. In 2011, for instance, it was asked by the Kazakh government to draw up recommendations for the country’s policy on energy efficiency, and to devise a strategy to this effect. The agency has also been conducting energy audits of the largest industrial companies in Kazakhstan. It offers training courses for energy experts from the public administration and for energy advisors. The German Energy Dialogue was coorganised by the German Energy Agency, the Committee on Eastern European Economic Relations, and the Delegation of German Industry and Commerce in Central Asia. The German Energy Agency was supported by the Federal Ministry for Economic Affairs and Energy in preparing the conference.

FURTHER INFORMATION

[↪ International energy policy](#)

Quote of the week



© Orcan Energy AG

“Turning industrial waste heat into electricity is an important step towards greater energy efficiency. Electrical energy is more useful than heat energy, as it can be used universally – including for the generator’s own operational processes, which helps them lower their electricity bill.”

Dr Andreas Sichert, CEO and co-founder of Orcan Energy AG

What the press say

Today in our press review: a giant battery in a salt dome and lower grid costs for offshore wind power.



© fotolia/Knipserin

[computerbild.de, 24 July 2017: “Utility EWE: Green energy from a salt dome”](#)

The Oldenburg utility EWE will soon be using sodium-chloride and plastic to generate green energy. The group is using two of their salt domes in Jemgum, East Frisia, to build what will be a true mega battery. Computerbild explains how this is supposed to work (further information in German only).

welt.de, 17 July 2017: “Electricity from offshore installations will be cheaper to feed into the grid”

Electricity from offshore wind power will soon be cheaper not only to produce, but also to transport. Transmission network operator Tennet has announced that the new converter station off the North Sea coast in Lower Saxony will be 15% cheaper to build than previous projects. For more information, please go to the newspaper’s website (further information in German only).

Germany and France want to cooperate on renewables

Germany and France are planning to engage in closer cooperation on energy. This was agreed at the Franco-German Ministerial Council. Specific projects for cooperation include the European Clean Energy Package, integrating renewables in distributed grids, and joint renewables auctions (further information in German only).

You can subscribe to the Energy Transition

Order the international edition of the "Energiewende direkt" Newsletter [here](#).
