

# Fiscal Instruments for Biodiversity in Germany

**Kai Schlegelmilch**

President and Co-Founder of  
Green Budget Germany (GBG), Forum Ökologisch-Soziale Marktwirtschaft (FÖS),  
**Based on a publication from the Federal Agency for Nature Conservation (BfN)**

[Kai.Schlegelmilch@foes.de](mailto:Kai.Schlegelmilch@foes.de)

[www.foes.de](http://www.foes.de)

[www.green-budget.eu](http://www.green-budget.eu)

Global Conference on Environmental Taxation (GCET)

Limassol/Cyprus, 27.09.2019



# Biodiversity harmful subsidies in Germany

+ Preliminary estimates of  
 the impacts of the  
 cornerstones for the  
 climate protection  
 programme 2030 (20.9.19)

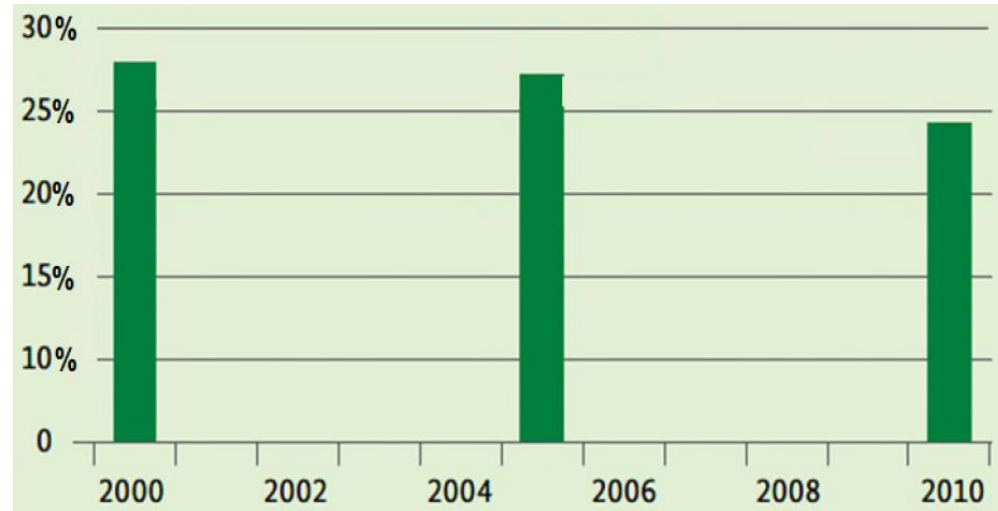
|   |                   |                  |
|---|-------------------|------------------|
| Housing and Transport                                       | 8.6 bn. €         | down<br>(+up)    |
| Agriculture and bio-energy                                  | 13.5 bn. €        | o                |
| (further) climate harmful subsidies<br>in the energy sector | 33.0 bn. €        | down             |
| <b>➔ Total sum</b>  | <b>55.1 bn. €</b> | <b>down (up)</b> |

*(Numbers are mainly for 2016, but some are from different years from 2009 on)*

# Separation effects due to transport









Unseparated low transport areas  
> 100 km<sup>2</sup> in Germany 2015  
(Source: BfN 2017c)

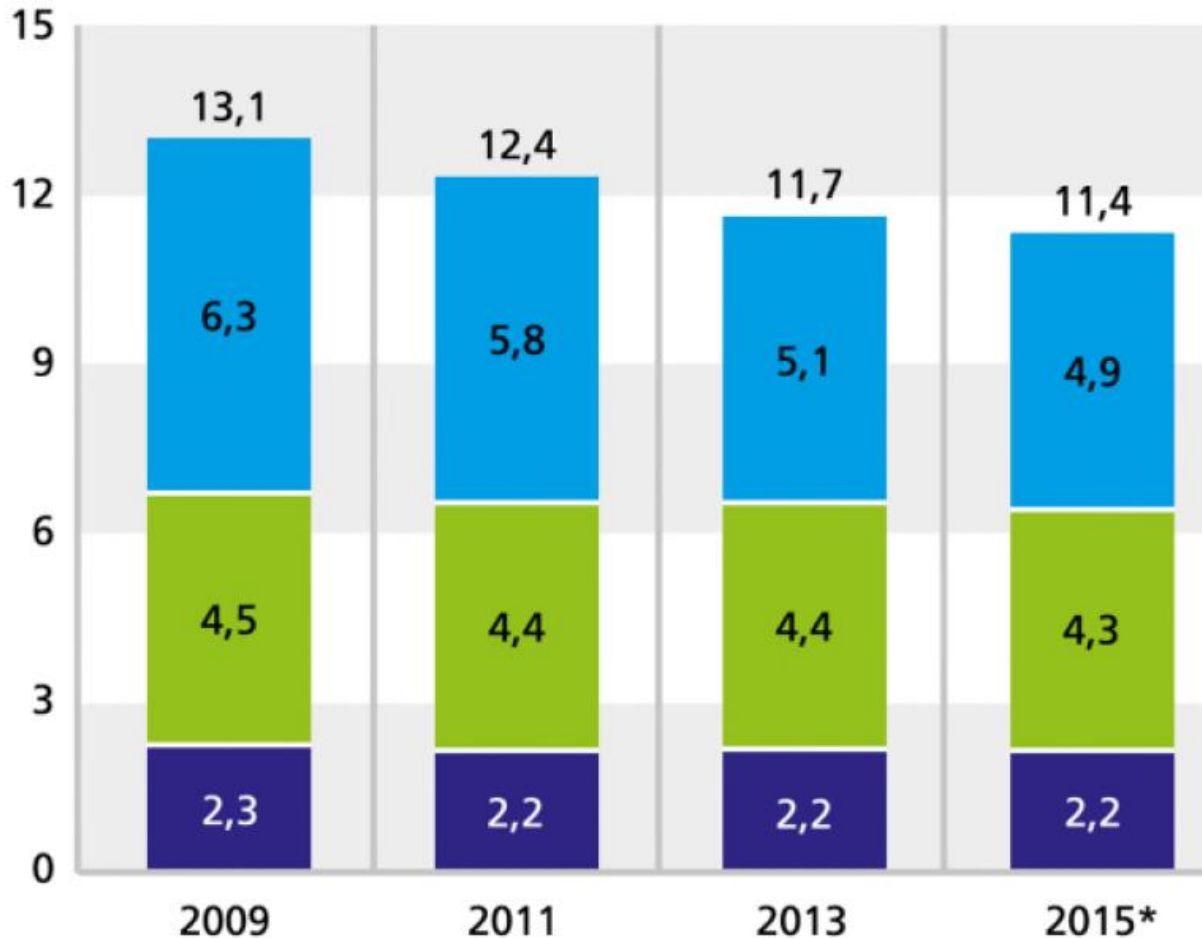


Development of unseparated, low  
transport areas (Source: BMUB  
2015a)

# Biodiversity harmful subsidies in the area of housings and transport in detail

|   |                   |
|---|-------------------|
|  <b>Commuting lump sum income tax reduction</b><br><i>(the new climate package from 20.09.19 increases them slightly further for 2021-2026)</i>                  | <b>5.1 bn. €</b>  |
|  <b>Tax subsidy for diesel (18 Ct./liter)</b>  | <b>7.35 bn. €</b> |
|  <b>Lump sum taxation of private use of company cars</b><br><i>(the new climate package from 20.09.19 increases them slightly further for electric vehicles)</i> | <b>3.1 bn. €</b>  |
|  <b>Subsidies for savings for buildings within the employees savings supplement and the home buildings law</b>  | <b>0.44 bn. €</b> |
|  <b>Subsidies for children's housings</b>  | <b>1.0 bn €</b>   |
|  <b>Social housing buildings?</b><br><i>(No alternative, important is the choice of the locations)</i>   | <b>3,6 bn. €</b>  |

# Development of the share of areas with a high nature value (HNV) in % of agricultural areas








Moderate high nature value  
(HNV III)

High Nature value (HNV II)

Very high nature value (HNV I)



# Biodiversity harmful subsidies in agriculture in detail (in billion € p.a.)



|   |      |
|---|------|
|  Direct payments from the first pillar of the European Common Agricultural Policy (CAP) | 4.85 |
|  Value Added Tax Reduction for animal products (meat, milk, etc.)                       | 5.20 |
|  Biofuel quota with a value of around   | 1.05 |
|  Subsidies via the energy tax and the annual road tax                                   | 0.49 |
|  Support for the promotion of energy plants within the Renewable Energy Act (EEG/FIT) | 1.90 |

# Biodiversity harmful subsidies in the area of energy supply and consumption (in mio. € p.a.)

|  |            |
|--|------------|
| Strom- und Energiesteuer Ermäßigungen für das Produzierende Gewerbe und die Land- und Forstwirtschaft                  | 1.178      |
| Spitzenausgleich bei der Ökosteuern für das Produzierende Gewerbe  | 2.182      |
| Steuerentlastung für bestimmte energieintensive Prozesse und Verfahren   | 1.333      |
| Begünstigungen für die Braunkohlewirtschaft  | min. 304   |
| Energiesteuervergünstigungen für Kohle   | 100        |
| Herstellerprivileg für die Produzenten von Energieerzeugnissen   | 300        |
| Energiesteuerbefreiung für die nicht-energetische Verwendung fossiler Energieträger                                    | min. 1.570 |
| Kostenfreie Zuteilung der CO <sub>2</sub> -Emissionsberechtigungen   | 3124       |
| Besondere Ausgleichsregelung des EEG für stromintensive Unternehmen und Schienenbahnen                                 | 2.700      |
| Eigenstromprivileg des EEG (Industrie)   | 1.600      |
| Begünstigungen des energieintensiven Industrie bei den Stromnetzentgelten  | 300        |
| Privilegierung von Sondervertragskunden bei der Konzessionsabgabe für Strom  | 3.900      |
| Ermäßigte Sätze für Gewerbe und energieintensive Industrie bei der Kraft-Wärme-Kopplung-Umlage                         | 24         |
| Energiesteuervergünstigungen für Dieselkraftstoff  | 7.353      |
| Energiesteuerbefreiung des Kerosins  | 7.083      |
| Energiesteuerbefreiung der Binnenschifffahrt   | 170        |
| Energiesteuerbegünstigung von Arbeitsmaschinen und Fahrzeugen, die ausschließlich dem Güterumschlag in Seehäfen dienen | 25         |



# Compensation payments for physical impacts – (in billion € p.a.)

|   |       |
|---|-------|
|  For excessive use of fertilisers | > 1.0 |
|  For excessive use of pesticides  | 1.0   |

# Compensation payments for the excessive use of fertilisers

Revenues should be used for

- Recycling into the agricultural sector,
- Targeted measures in particularly sensitive areas; and
- Increasing acceptance.

**Overall, benefits outweigh cost by up to 70 bn € p.a.:**

The synthetic nitrogen fertiliser brings benefits of about 20-80 billion € p.a.

However, the societal costs through damages of the health, the climate and ecosystems add up to 20-150 billion € p.a.

The federal government declared in its report on the challenges of nitrogen, that there are additional measures necessary – on top of the reform of the fertiliser ordinance.

**BfN argues that this should comprise a nitrogen surplus charge to reduce the negative external effects of agriculture and compensate for them.**

# Compensation payments for the excessive use of pesticides

- Price elasticity is empirically around 2.8% = 10% price-increase leads to a reduction of the use of 2.8%, however, the variety of such reductions is between 1 and 11%.
- Given this low price elasticity it may be reasonable to use the revenues for accompanying measures such as more efficient spraying technologies and non-chemical plant protection, thus also increasing acceptance and environmental impacts.
- Different than in other environmental policy areas the financing effect of charges is of particular relevance
- Biodiversity in agriculture relies substantially on certain structures such as bushes etc. which should thus be supported.
- Based on the experiences in Norway and Denmark a **risk class differentiated charge should be introduced**
- **Such a charge would bring revenues of about one billion € p.a.**

# Restructuring minor sums of biodiversity harmful subsidies would be a substantial increase of biodiversity expenditures

The current share of biodiversity expenditures is very small: A substantial increase is necessary to ensure meeting all biodiversity objectives

## Public biodiversity expenditures in Germany

Conversion in  
Euros per household

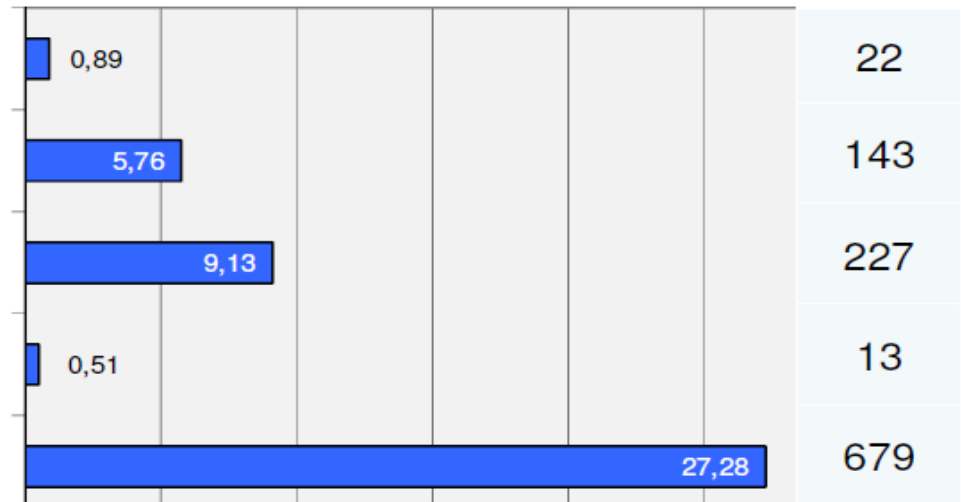
Naturschutzausgaben (Bund, Länder und Gemeinden) 1)

Direktzahlungen an landwirtschaftliche Betriebe 2)

Kulturausgaben von Bund, Ländern und Gemeinden 3)

davon Ausgaben für Denkmalschutz und Denkmalpflege

Umweltschutzausgaben des Staates und privatisierter öffentlicher Unternehmen 4)



Biodiversity harmful subsidies 55 bn. €

0,00 5,00 10,00 15,00 20,00 25,00 30,00

Mrd. € in 2009 (in bn. €, in 2009)

## Aspects of the cornerstones for the climate protection programme 2030 (20.9.19) I (**positive/negative** impacts) *(Climate related aspects are in this programme, only indirect impacts on biodiversity)*

1. CO<sub>2</sub>-price will start for transport and heatings/buildings at a very low level of with a fix price for allowances of 10€/t CO<sub>2</sub> from 2021 (=3 Ct/l) to 35 € in 2026 (= 12 Ct).

To this end a national emissions trading system (ETS) with a minimum price and a **maximum price** (2025 = will be set up. From 2026 a maximum amount will be fixed which is then reduced yearly.

The auctioning will take place within the price corridor or 35-**60** €. In 2025 the decision will be made, if such min.+max.prices are reasonable and necessary.

2. **Commuting lump sum will be increased from 30 Ct/km to 35 Ct/km from 2021-2026 (but only beyond 20 km distance)**

## Aspects of the cornerstones for the climate protection programme 2030 (20.9.19) II

**3. Long-distance train tickets will only be charged with 7% VAT (like public local transport up to 50 km). This tax reduction will be passed on to the customer.**

**4. Air ticket tax for national flights (currently less than 8€) will be increased slightly to finance above no. 2.**

**Air ticket prices must comprise all charges, taxes and other levies in order to avoid dumping prices for air tickets. Hence, a minimum price will be established.**

**5. Additional grant of 1 bn. € p.a. until 2030 for German railways (Deutsche Bahn), overall 11 bn €.**

**6. The electricity price should decrease by lowering the EEG-levy (RE) by each 0.25 Ct/kWh in 2021 and 2022, by overall 0.625 Ct in 2023. Currently this levy is 6.4 Ct which is about 20% of the price.**

**7. 2021 the annual road tax will tax cars with a higher CO<sub>2</sub>-emission higher.**

**8. The company car taxation for electric vehicles will be lowered.**

## Conclusions

- 1. There are at least 55 billion Euros biodiversity harmful subsidies in Germany which should be reduced**
- 2. Compensation payments for the excessive use of fertilisers and pesticides should be introduced**
- 3. A minor part of such additional revenues would be sufficient for upscaling public biodiversity expenditures substantially for meeting biodiversity objectives**
- 4. The impacts of the cornerstones for the climate protection programme 2030 (adopted on 20.9.19 – Scientists/Fridays for Future-World Day) should be in line with these conclusions.**
- 5. Yet their impacts are ambivalent. Hence, measures should be streamlined in the further implementation process.**
- 6. And if not sufficient, possibly additional measures are required.**

**Thank you very much for your attention!**

**[Kai.Schlegelmilch@foes.de](mailto:Kai.Schlegelmilch@foes.de)**  
**[www.foes.de](http://www.foes.de)**

## **Main Source:**

**Federal Agency for Nature Conservation (BfN):**

**Edited by Burkhard Schweppe-Kraft, Kai Schlegelmilch, Lars Berger:**

Reduction of biodiversity harmful subsidies and compensation payments for physical impacts – Economic Instruments for the protection of biodiversity

*(„Abbau naturschädigender Subventionen und Kompensationszahlungen auf stoffliche Belastungen – Ökonomische Instrumente zum Schutz der biologischen Vielfalt“), Bonn/Germany, April 2019,*

[https://www.bfn.de/fileadmin/BfN/oekonomie/Dokumente/Abbau\\_naturschaedigender\\_Subventionen.pdf](https://www.bfn.de/fileadmin/BfN/oekonomie/Dokumente/Abbau_naturschaedigender_Subventionen.pdf)

**This is the German version only, but the English version will be available soon.**