

For our Environment

Umwelt 
Bundesamt

Germany's agriculture GHG reduction commitments and measures to meet targets

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Structure

- Germany's overall climate protection strategy
- 5 agricultural measures laid down in the Climate protection programme

History of Germany's Climate Protection

2016: Climate Protection Plan

- Non binding sector targets (2030) for the non-ETS sector

Climate Action Package (non-ETS):

September 2019: Climate Protection Programme

- Sector specific measures
- Sectors in charge for measures

December 2019: Federal Climate Change Act

Federal Climate Change Act

- Enshrines greenhouse gas reduction target 2030 into law
- Assigns sector specific annual emission budgets 2020-2030
- Sector (ministry) responsible for fulfillment
- By non-fulfillment: emergency adjustment programme within 3 months
- Government has to decide on the programme
- A five-person expert council advises government/ cabinet
- Non-fulfillment is not financially sanctioned

Yearly binding budgets- Agriculture

Annex 2 – Permissible annual emission budgets (*ad* section 4)

| Annual emission budgets in millions of tonnes of CO ₂ equivalent | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|---|------|------|------|------|------|------|------|------|------|------|------|
| Energy | 280 | | 257 | | | | | | | | 175 |
| Industry | 186 | 182 | 177 | 172 | 168 | 163 | 158 | 154 | 149 | 145 | 140 |
| Buildings | 118 | 113 | 108 | 103 | 99 | 94 | 89 | 84 | 80 | 75 | 70 |
| Transport | 150 | 145 | 139 | 134 | 128 | 123 | 117 | 112 | 106 | 101 | 95 |
| Agriculture | 70 | 68 | 67 | 66 | 65 | 64 | 63 | 61 | 60 | 59 | 58 |
| Waste and Other | 9 | 9 | 8 | 8 | 7 | 7 | 7 | 6 | 6 | 5 | 5 |

Peculiarity of the agricultural sector in the climate law:
Inclusion of the combustion of mobile and stationary facilities in agriculture, forests and fisheries (1.A.4.c)

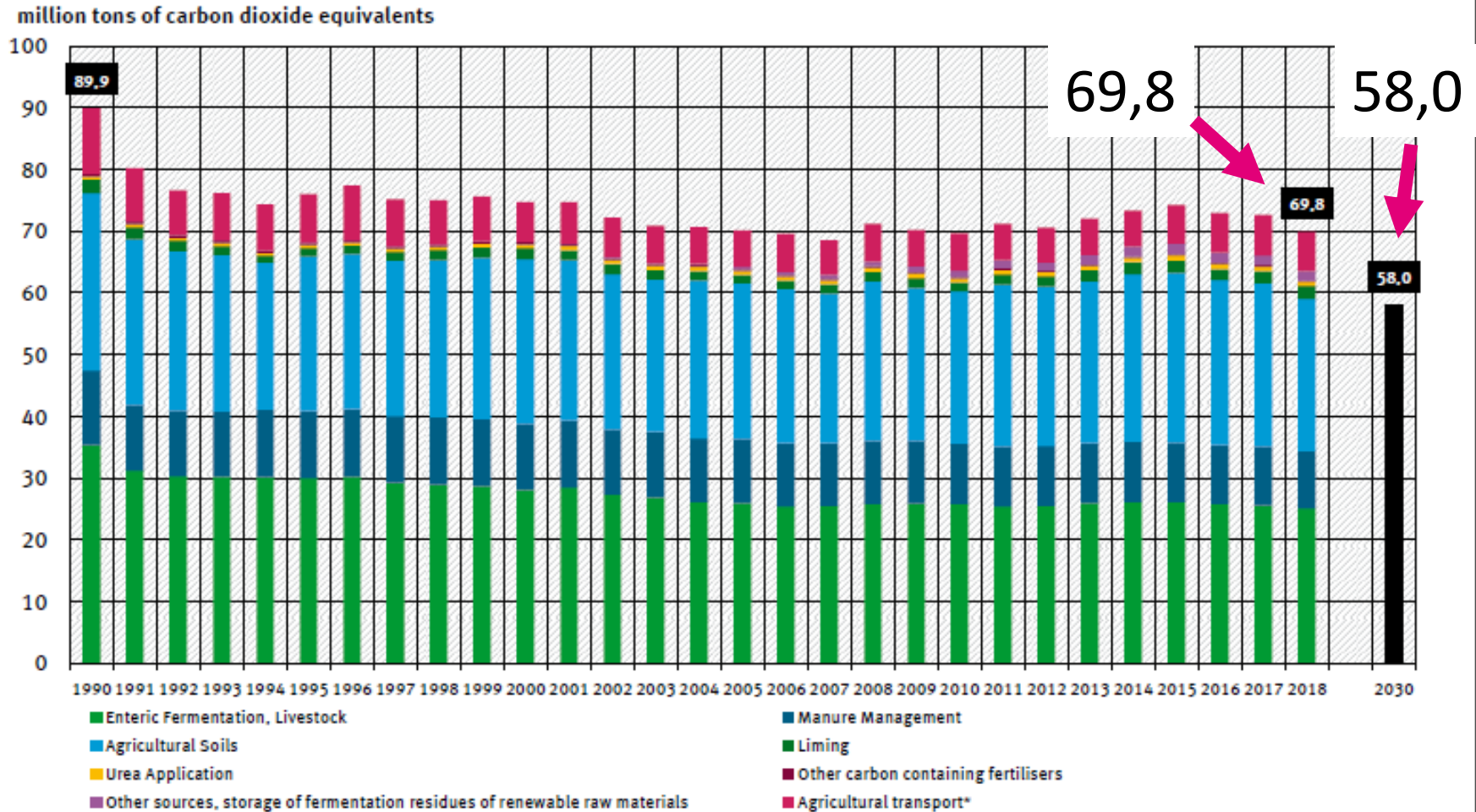
Federal Climate Change Act

Potential Problems:

- based on very insecure data
- linear yearly reduction targets are unrealistic
- no real sanctions for the sector
- Targets are not scientifically based
- Sector specific approach is not cost effective
- No incentive for the sectors to do more or help other sectors

Greenhouse gas emissions from agriculture by sector of the German FCCA

incl. Target for the year 2030 from the German Federal Climate Change Act (FCCA)



* contains mobile & stationary combustion systems of agriculture, forestry and fisheries
 Note: The allocation of emissions corresponds to the sectors of the FCCA, not to the categories of UN reporting.

Quelle: German Environment Agency: Nationale Trendtabellen für die deutsche Berichterstattung atmosphärischer Emissionen seit 1990, Emissionsentwicklung 1990 bis 2018 (EU-Submission 01/2020)

Climate Protection Programme - Agriculture

5 Measures

1. Reduction of Nitrogen Surpluses (with Ammonia reduction)
2. Strengthening the fermentation of organic fertilizer in biogas facilities
3. Extension of organic farming area
4. Reduction of emissions in animal farming
5. Energy efficiency in agriculture

1. Reduction of Nitrogen Surpluses (with Ammonia reduction)

Instruments

1. Revising the Fertilizer Ordinance (2017, 2020)
2. Implementation of the NEC-Directive (Technical Instructions on Air Quality Controls)
3. (gas tight storage of animal waste-> technical+legal implementation unclear)

1. Reduction of Nitrogen Surpluses (with Ammonia reduction)

Potential Problems:

no new instruments, success unclear

2. Strengthening the fermentation of organic fertilizer in biogas facilities

Background: Germany subsidizes biogas facilities since 2000

- most of the feedstock are crops (mostly maize)

- this has been heavily criticized

- goal is now to use mostly organic fertilizer

Instruments:

- transforming existing subsidy-instruments for high percentage manure fermentation

- Subsidizing the Re-Utilization of old facilities

2. Strengthening the fermentation of organic fertilizer in biogas facilities

Potential Problems:

- 20-years investment protection of existing facilities
- Lock-in effect because of animal concentration

3. Extension of organic farming area

Background

- Effect is per ha (compared to tons)
- Works through the reduction of mineral fertilizer

Instruments

- More information/ education for farmers who want to change
- Increase in research money
- No increase in subsidies

3. Extension of organic farming area

Potential Problems:

- Substitution imports might counter balance the reduction
- Instruments are vague

4. Reduction of emissions in animal farming

Instruments

- Implementation of higher animal-welfare standards (more place, less animals)
- Improving of legal planning specifications
- Development of an animal farming strategy

Potential Problems:

- Instruments vague
- in combination with the fact that agricultural production must not decrease, probably not effective

5. Energy efficiency in agriculture

Only relevant in Germany

Instruments

- Programme for the promotion of energy efficiency
- Programme for the substitution of fossil fuels with renewables

Conclusion

- Measures in the climate programme are vague
- Builds partly on existing measures
- The strict separation of sectors is not cost effective
- The fixed targets are contra incentive to „doing more“
- Effectiveness is hard to predict

Thank you for your attention

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