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Energie. Wasser. Leben.

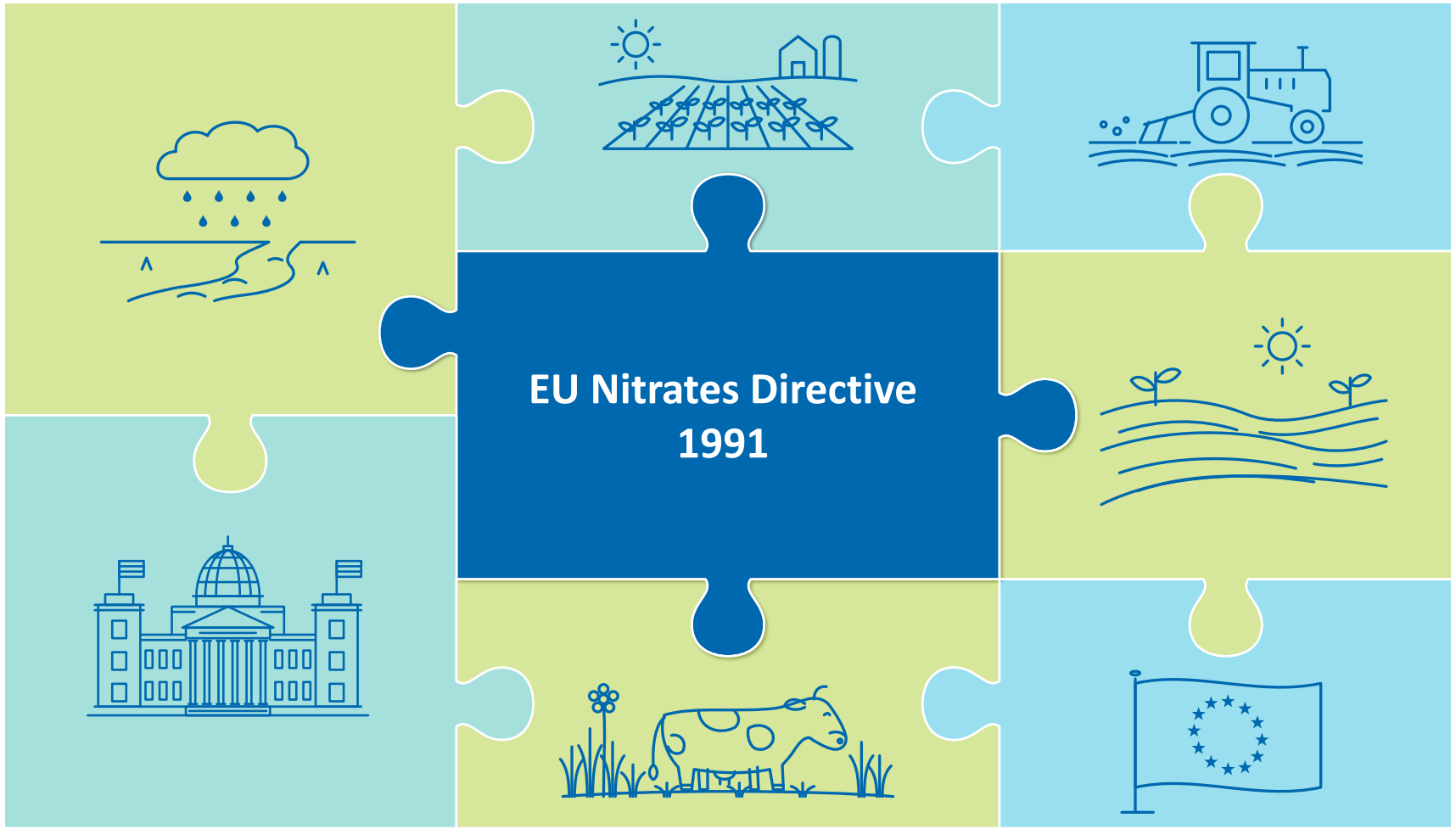
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im BDEW

The German Nitrogen Puzzle: Policy, Impact, Perspectives

Martin Weyand, Member of the General Executive Management Board of the BDEW

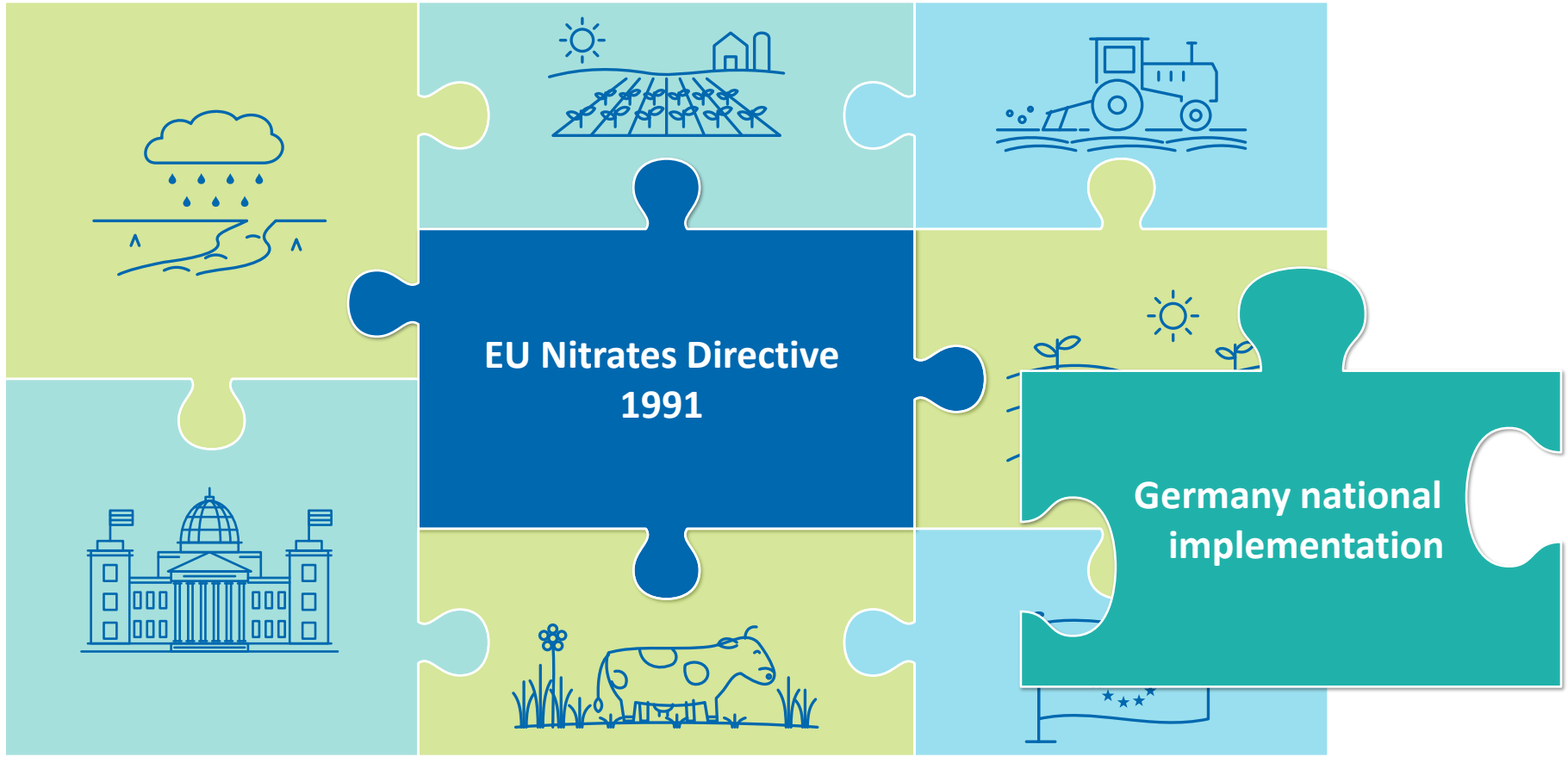
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The Nitrogen Puzzle:



The Nitrogen Puzzle:

Sounds easy enough but not for Germany



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Nitrates Directive – EU Framework



GOALS

OBJECTIVE
Reduce nitrate pollution from agriculture
Prevent further pollution

IDENTIFY & TARGET
Identify affected waters
Designate vulnerable zones

ACTION PROGRAM
Mandatory measures for vulnerable zones or nationwide application

EFFECTIVE MEASURES
Limit nitrogen losses and fertilisation
Additional measures where needed

MONITORING & REVIEW
Monitor water quality and effectiveness
Review and adapt at least every four years

KEY REFERENCE POINTS

50 mg NO_3/l
Groundwater threshold for identifying affected waters
ANNEX I,), Nitrates Directive (91/676/EEC)

170 kg N/ha
General limit for livestock manure*
ANNEX III, Nitrates Directive (91/676/EEC)

VULNERABLE ZONES
Areas draining into affected waters and contribute to pollution
Art. 3 (2), Nitrates Directive (91/676/EEC)

*general limit; specific derogations and additional conditions may apply

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Nitrates Directive – EU Framework



Flexible implementation - binding objective

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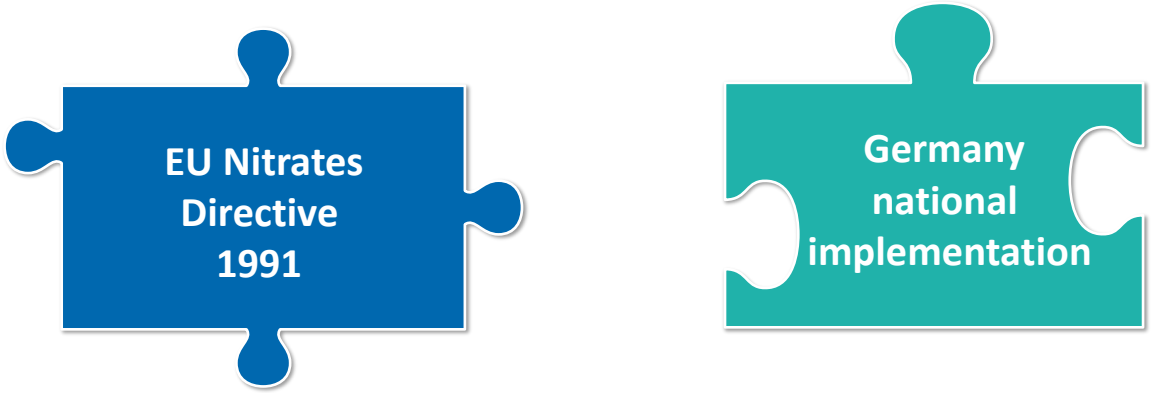
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Germany keeps rebuilding its pieces



EU actions

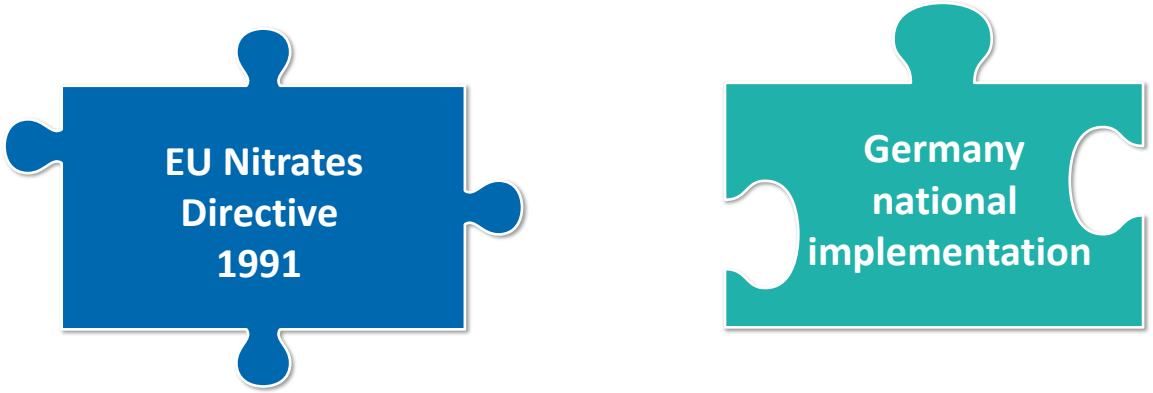
1991	1996	2013	2017	2018	2019	2020	2022	2023	2025	2026
Nitrates Directive		Infringement procedure		ECJ judgment		Ongoing negotiations with Germany		Infringement procedure closed		

National actions

1996	2017	2018	2019 – 2022
Fertilizer Ordinance DüV	Fertilizer Act DüngeG + revised DüV	Nutrient balance ordinance	Ongoing negotiations with the EU, amendments and tighter restrictions for fertilization

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Germany keeps rebuilding its pieces



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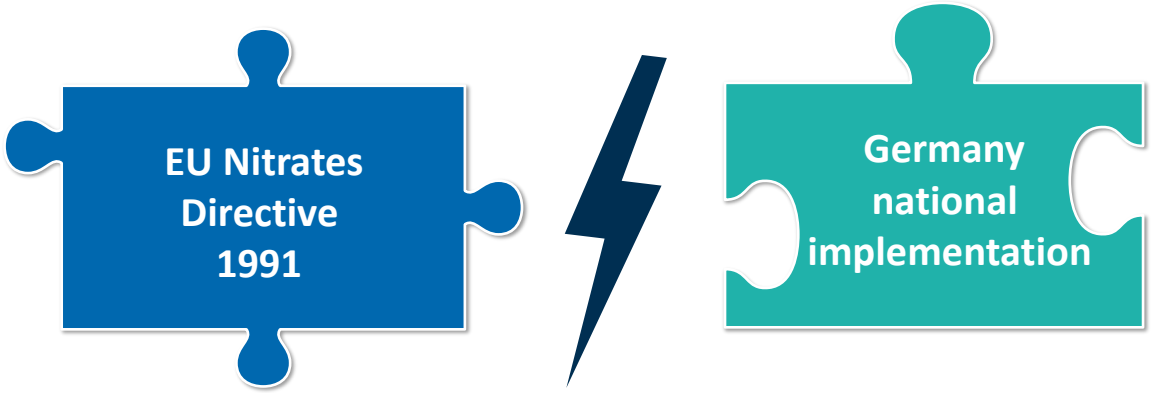
National actions

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Puzzle solved?

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Germany keeps rebuilding its pieces



EU actions

Nitrates Directive (1991)

Infringement procedure (2013)

ECJ judgment (2018)

Ongoing negotiations with Germany (2019–2022)

Infringement procedure closed (2023)

1991 | 1996 | 2013 | 2017 | 2018 | 2019 | 2020 | 2022 | 2023 | 2025 | 2026

National actions

- 1996: **Fertilizer Ordinance DüV**
- 2017: **Fertilizer Act DüngeG + revised DüV**
- 2018: **Nutrient balance ordinance**
- 2019–2022: **Ongoing negotiations with the EU, amendments and tighter restrictions for fertilization**
- 2025: **Nutrient balance removed**
- 2026: **Courts rulings + reform**

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Overview court rulings

BVerwG
EMS

6 Mar 2025

Lower Saxony and North Rhine-Westphalia must revise the Ems River Basin Management Programme to reduce nitrate pollution in groundwater.

BVerwG
Action program

8 Oct 2025

Germany must adopt a dedicated national action program on nitrate pollution, as the Fertilizer Ordinance alone is insufficient.

BVerwG
AVV GeA

24 Oct 2025

Bavaria's implementing regulation on the Fertilizer Ordinance was declared invalid because its legal basis does not meet constitutional requirements for legal certainty.

Quality measures not questioned.



Legal gaps: the pieces don't fit the puzzle!

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One ruling – sixteen consequences

Consequences of the court ruling:

16/16	**All Länder** suspended controls / sanctions
6	**6 Länder** stopped the designation of polluted areas entirely



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One ruling – sixteen consequences

Consequences of the court ruling:

16/16	**All Länder** suspended controls / sanctions
6	**6 Länder** stopped the designation of polluted areas entirely

Court ruling:

Water protection is a task of the highest order for the common welfare.

The substance of the AVV GeA is just and reasonable.

BVerwG, 24 Oct 2025



Länder with suspended polluted areas

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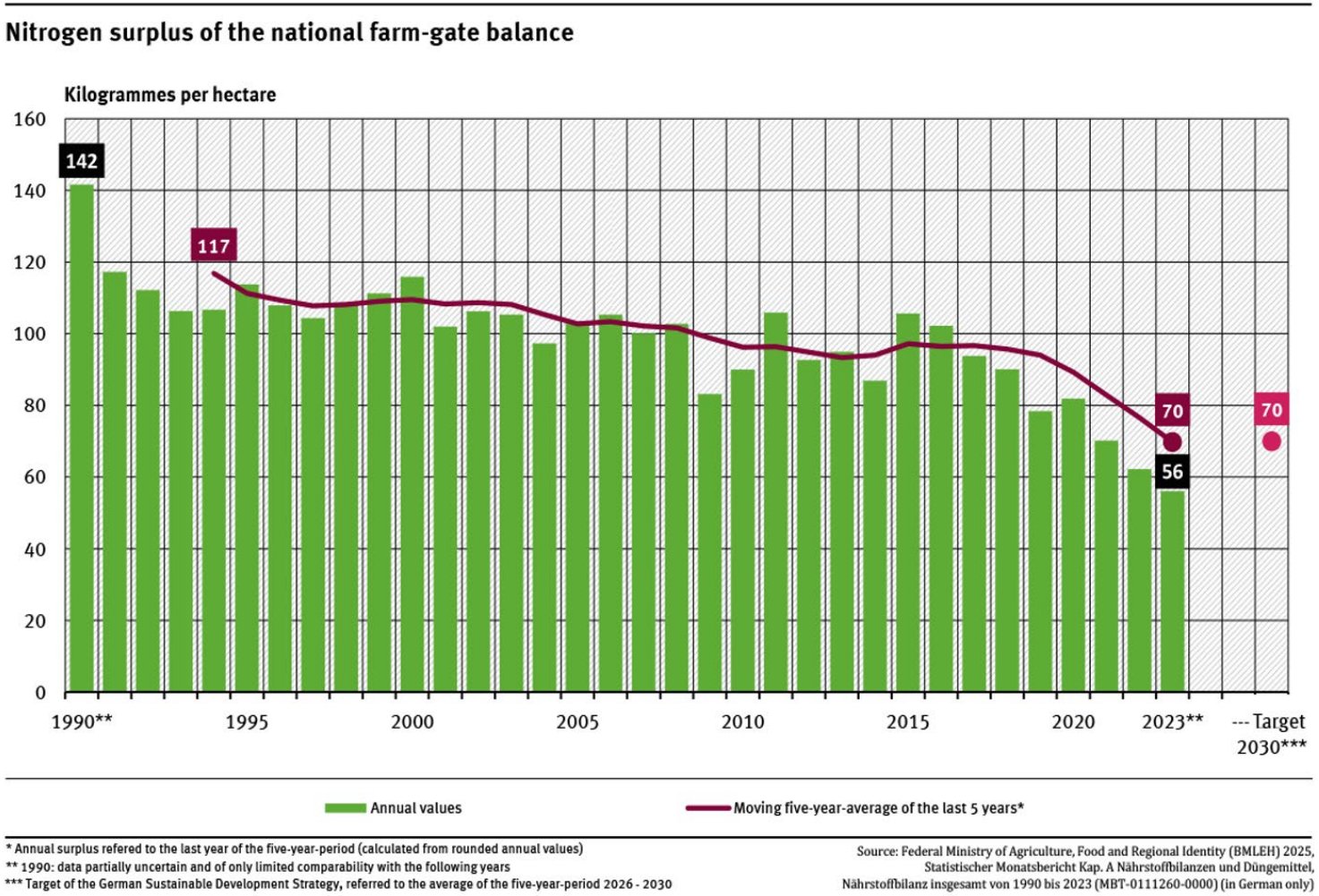
Reality check: What does the water tell us?

25.6 %

of EU nitrate monitoring sites in Germany above 50 mg NO_3/l

2016–2019	26.6 %
2020–2022	25.6 %

- Some progress.
- Objective not reached.



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WHY DOES THE PROBLEM PERSIST?

Fertilizer Ordinance (DüV)

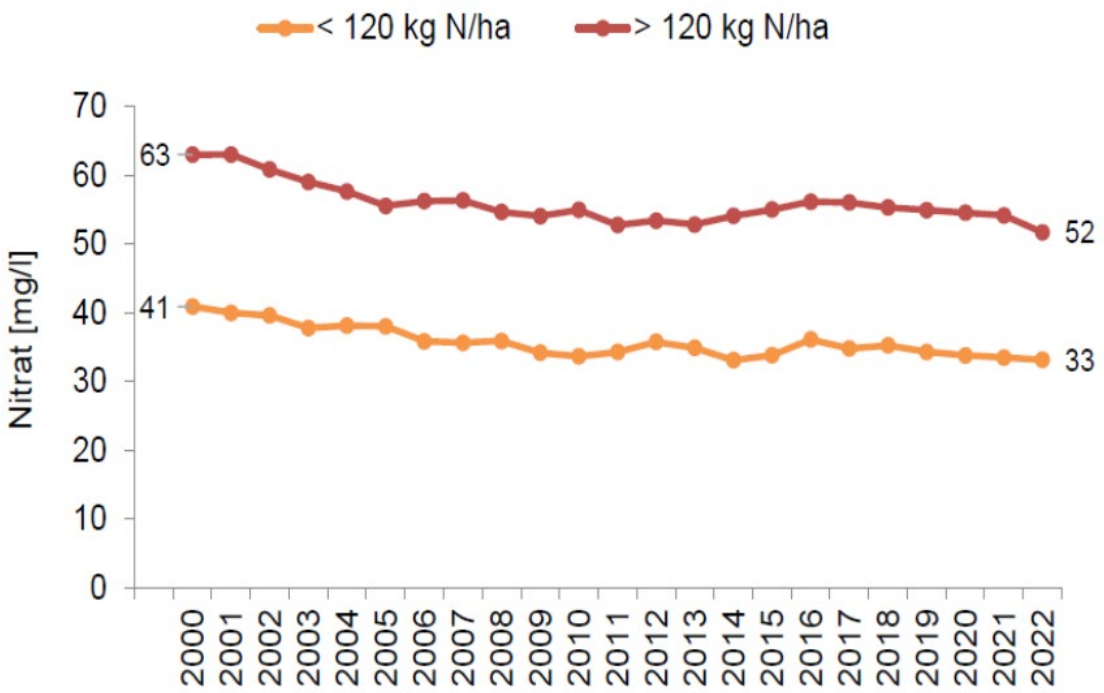
- Fertiliser demand for arable crops is generally overestimated
- Too little nitrogen from catch crops is credited to the following crop
- Too little nitrogen released from organic-rich soils is credited
- **No valid farm data are available** (farm gate balances for N and P are missing)

What we need is a legislation for better nutrient management in resilient crop production systems in line with the EU Green Deal approach.

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WHY DOES THE PROBLEM PERSIST?
Too much organic fertiliser input (slurry, digestates) on arable soils

Nitrate in groundwater by organic N input, mg/l, Lower Saxony



Nitrate concentration in groundwater bodies (<20 m below soil surface) depending on organic fertiliser input on commercial farms in Lower Saxony (n = 604 water samplings). Source: NLWKN 57 (2023), cited by Taube & Bach (2025)

European legislation should limit organic fertiliser input on arable soils to

~~170~~ → **120**

kg N/ha today

kg N/ha instead

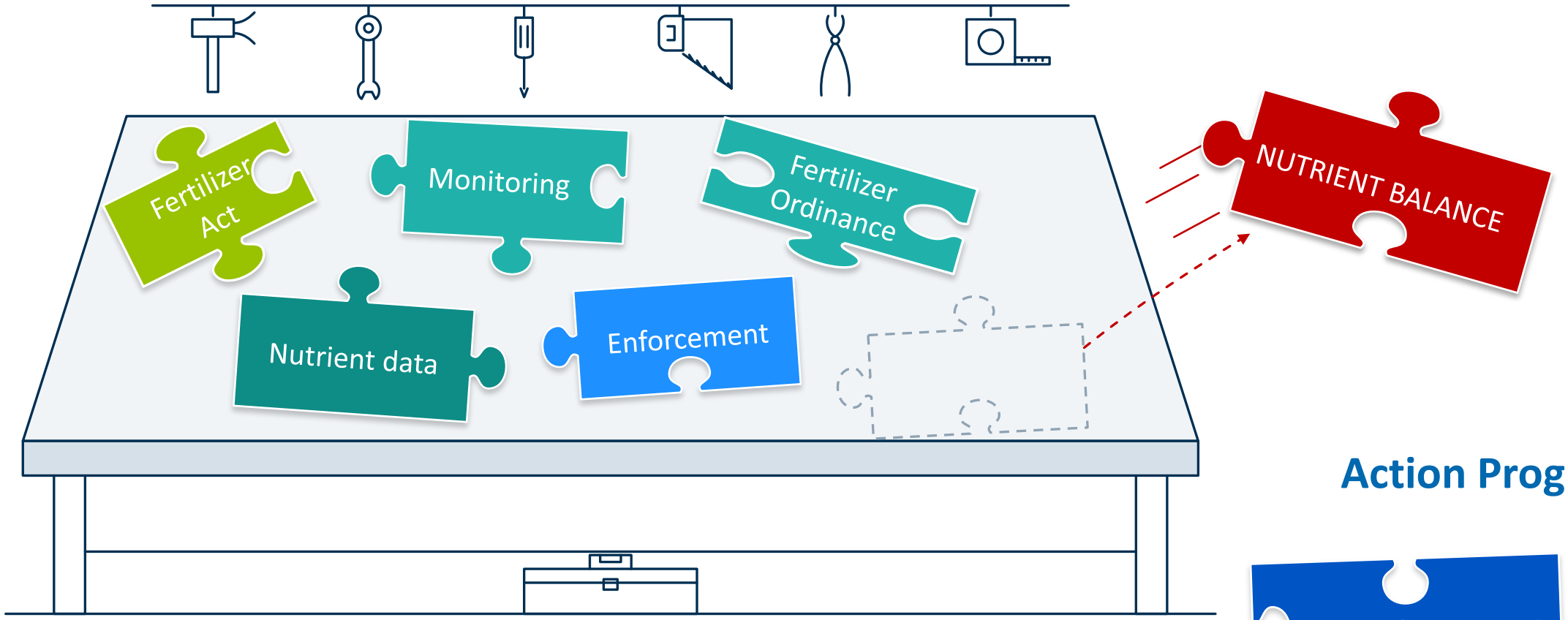
The RENURE amendment is thus proving to be **counterproductive!**

Not in line with the Green Deal …

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So Germany redesigns the puzzle. Again.

Meeting each other at the workbench



Action Programme?

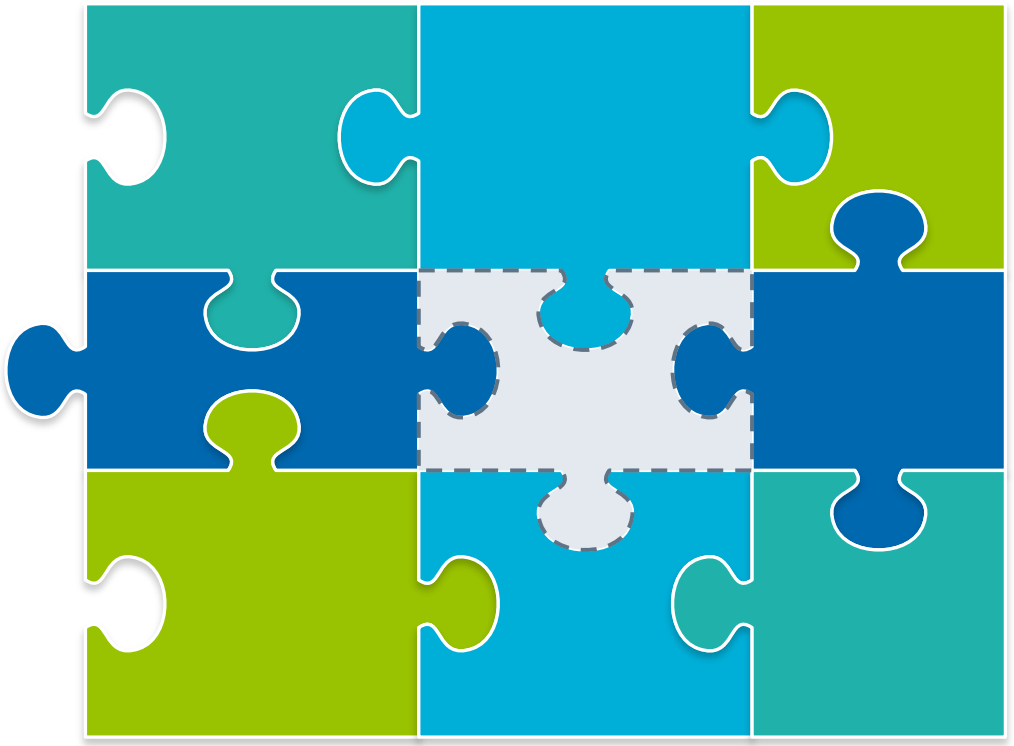


Less information while more evidence is needed?

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Choose your own puzzle?

Designation of Polluted areas?





Regionalisation?
Länder may choose different approaches

Equivalent water protection?
EU conformity?
(Cross-border) practicability?

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The Nitrates Directive still got it!

European Commission Evaluation 2026

✓	✓	✓
Relevant	Overall effective	EU added value

Room for smarter implementation

2013–2023
Infringement procedure
→ German reforms

2026
Implementation under pressure again

EU Nitrates Directive: Best we can have!

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Make the pieces fit!



Hope we can find all the pieces and fit them together!

To be continued…

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