

**BSC** | BALTIC  
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CENTRE



S Y K E

Finnish Environment Institute

# BONUS TOOLS2SEA

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<https://projects.au.dk/bonus-tools2sea/>

<https://www.researchgate.net/project/Policy-tools-for-Baltic-Sea-nutrient-management-BONUS-TOOLS2SEA>



FORMAS

AARHUS UNIVERSITY (DENMARK)





# HELCOM annex III, part 2 on agriculture

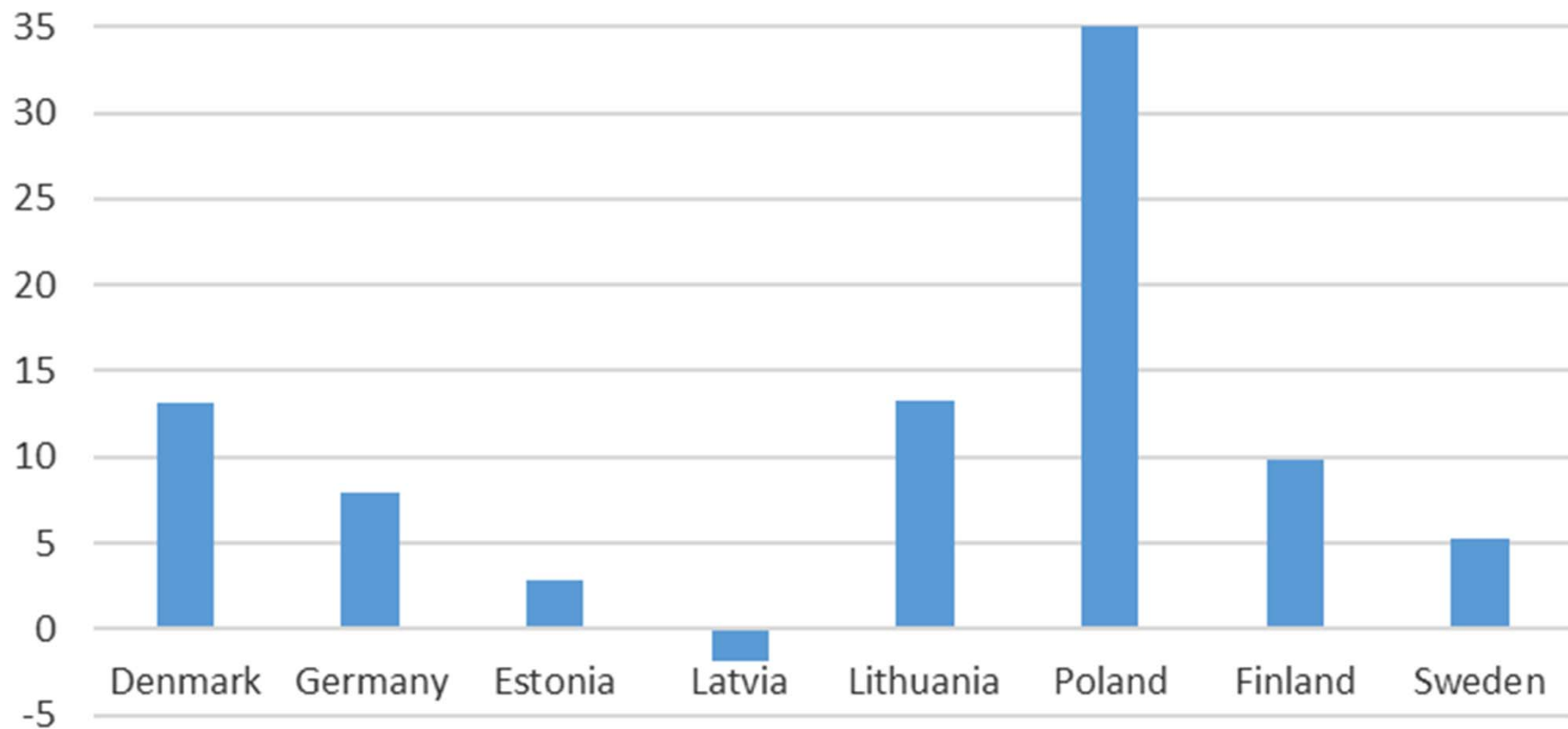
- stricter than EU nitrates directive

- Animal density balanced against crop needs for nutrients
- Manure storage capacity – min. 6 months
- Max. fertilization based on nutrient balances
- Livestock manure max. 170 kg N and 25 kg P per hectare
- Permit requirements for large livestock farms
- Autumn and winter crop cover
- Buffer zones, wetlands and groundwater zoning
- Sealed manure storage tanks; ammonia action plans



## PHOSPHORUS 1997/2003 - 2015

### Reductions in nutrient surplus in 1000tN



Source: Eurostat



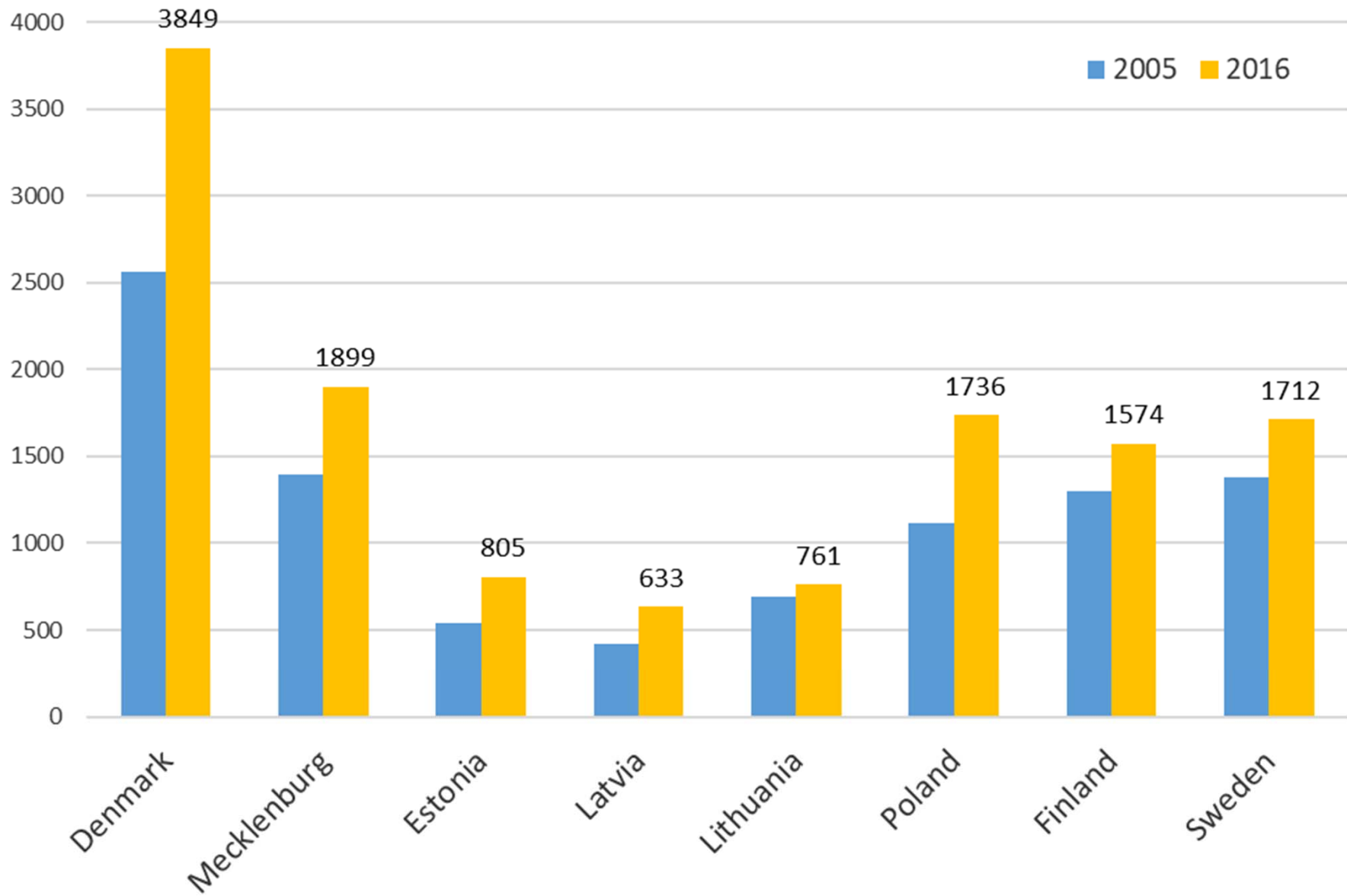
# HELCOM's reduction targets for 2021

tonnes	Nitrogen	Phosphorus
Denmark	2890	38
Estonia	1800	320
Finland	2430 +600*	330 +26*
Germany	7170 +500*	110 +60*
Latvia	1670	220
Lithuania	8970	1470
Poland <sup>2</sup>	43610	7480
Russia	10380*	3790*
Sweden	9240	530

*The figures are rounded*

- Poland has 24% of nitrogen discharge to Baltic Sea
- 2018: Poland finalised new national plan for reductions

### Standard output in € per hectare UAA



Source: Eurostat

Thank you!