

NUTRITRADE

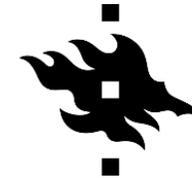
PA Nutri steering committee June 06, 2018

Anna Saarentaus, John Nurminen Foundation



NutriTrade in a nutshell

- Interreg Central Baltic project (2015-18) carried out by a consortium of 5 organisations
- Testing new measures to reduce nutrient loading (Pilots Gypsum, Fish, Mussel and Nutrient Exchange)
- Launching a digital platform, **Nutribute**, for channelling voluntary financing into efficient nutrient reduction measures in the Baltic Sea region
- Studying the use of so-called flexible mechanisms in water protection



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Pilot Gypsum



PILOT GYPSUM
55 FARMS
1559 HECTARES
6270 TONNES OF GYPSUM
144 TRUCK LOADS
5 TN OF REDUCED P



Results of Pilot Gypsum

- Dose: 4t/ha
- Best timing: autumn
- Reduces both particulate and dissolved reactive phosphorus (50% in total), erosion and dissolved organic carbon
- Impact: 5 years
- Cost: **70 €/kg P** reduced (220 €/ha)



Pilot Fish

Recycling nutrients and bringing cyprinid fish to the dinner table

- Cyprinid stocks have increased in Finnish coastal areas, mostly due to eutrophication of the Baltic Sea
- Through the fishing cyprinid fish, a significant amount of nutrients can be recycled from the sea to land
- The pilot promotes the use of domestic, underutilized cyprinid fish by the food industry in Finland

Pilot implementation

- Contracted fishermen selected through annual open calls
- Production chain consisting of committed partner companies

Operational principles

- Pre-conditions for fishing based on fish stock management ensure the ecological and social sustainability of the project
- All activities are open and transparent to the public and stakeholders



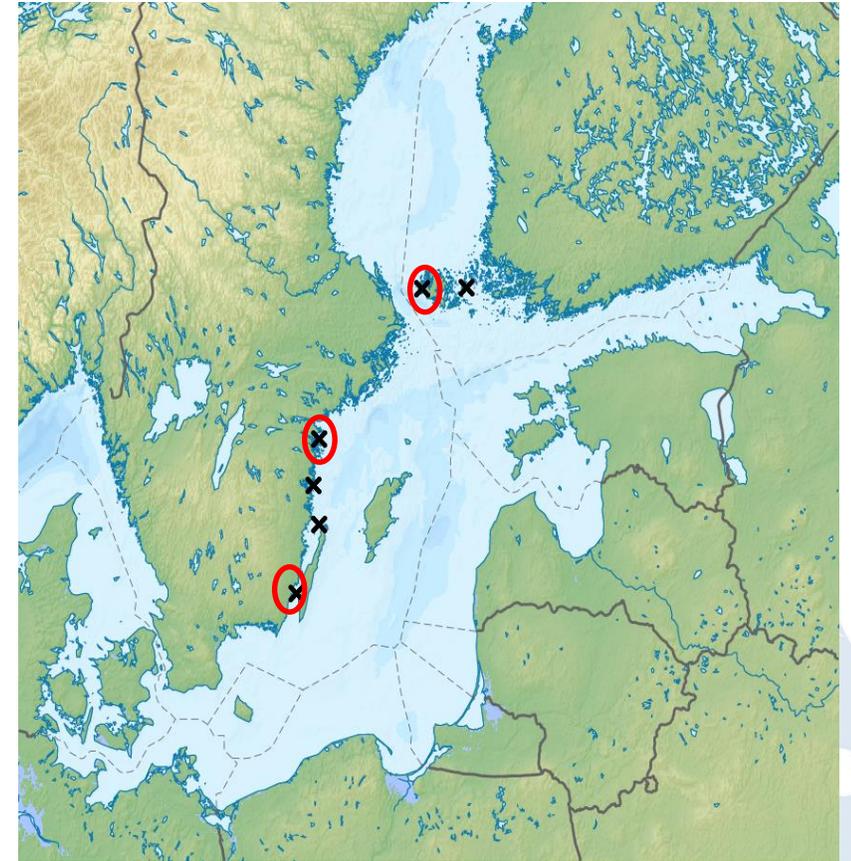
Results of Pilot Fish

- The first commercialized management fishery in the Finnish coastal waters
- Successful consumer products made of Archipelago Sea bream
- Phosphorus removed from the Baltic Sea from 250 in 2015 to 1200* kg P/a in 2017
 - *Based on the 0,8% P content in cyprinid fish (Setälä, RKTL), equivalent to 25% of annual P load from Turku Kakolanmäki WWTP
- The cost of **66€/kg of P** removed from the Sea



Pilot Mussel

- SLU procures harvests of mussels from the Baltic Sea in two separate tenders



Location of mussel farms (farms marked with red color have already been harvested)

Results of Pilot Mussel

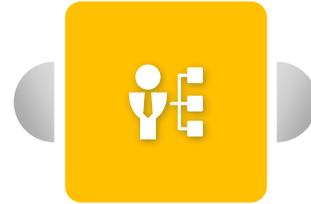
- If harvests are taken as planned, the total nutrient removal effect of the project is 858-1367 kg N and 54-80 kg P.
- The bids we have received are in the range of 1 to 2.5 EUR/kg harvested mussels.
- Cost per kg N removed: 100 to 417 EUR.
- Cost per kg P removed: 1,670 to 6,250 EUR.





What?

A free fundraising tool for activities that reduce eutrophication



For whom?

Project owners (citizens, NGOs, ...) and donors (citizens, companies, ...)



Why?

To support activities that protect the Baltic Sea & to secure their implementation

Nutribute - Crowdfunding for the Baltic Sea

Welcome to launch or support a campaign!

CREATE YOUR CAMPAIGN

MEASURES

Show All

Agricultural Activities

Industries

Municipal Wastewater Treatment

Other

Largest Impact

Most Cost Efficient

Most Funded

Rounding Off

Map View



Phosphorus removal in Kingisepp, Russia

📍 Russia

🕒 78 Days Left



Phosphorus removal at Vitebsk WWTP

📍 Belarus

🕒 115 Days Left

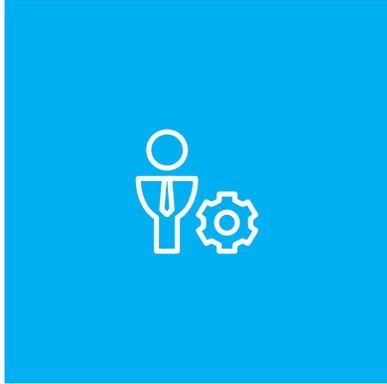


Pienet puhdistamot, suuri kuormitusriski

📍 Finland

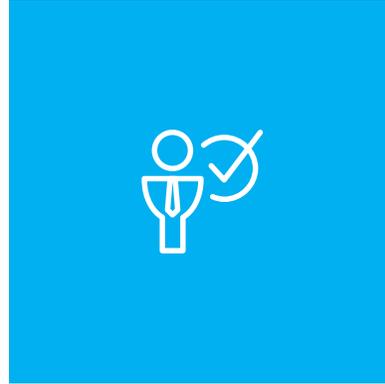
🕒 332 Days Left

Pilot Nutrient Exchange



INDUSTRIES WITH EXCESS OR IN NEED OF NUTRIENTS

- Mapping of nutrient sources and nutrient use
- Informing plants located near each other of the possibility for nutrient exchange



SECONDARY PRODUCTS FROM NUTRIBUTE

- Listing of potential measures and their secondary products
- Review of existing platforms for nutrient exchange



ROLE OF NUTRIBUTE

- Linking nutrient supply with demand (via existing platforms where possible)
- Info to be provided on the secondary products of nutrient reduction measures

Policy Recommendations 1

Gypsum application to agricultural support policies

- **HELCOM and its member states** to include gypsum amendment of arable fields in recommendations and documents
- **EU member states** to facilitate include of gypsum amendment in national agricultural support schemes and make concrete plans promoting gypsum as a measure reducing phosphorus load
- **The EU Commission** to ensure that CAP reform facilitates flexible introduction of gypsum in member states' national programmes
- **The Finnish government** to include gypsum in a non-remunerative agricultural investment support scheme

More info

<http://nutritradebaltic.eu/wp-content/uploads/sites/34/2018/05/NutriTrade-Policy-Brief-1-Gypsum-Amendment-and-Large-Scale-Use.pdf>

<http://nutritradebaltic.eu/wp-content/uploads/sites/34/2018/05/NutriTrade-Policy-Brief-2-Gypsum-Amendment-and-Policy.pdf>

Policy Recommendations 2

Nutrient Offsets

- Nutrient offsets could be utilized in environmental permitting; perhaps even should be used due to Weser-ruling
- Such practices are unlikely to emerge without explicit legislative measures; key ministries should act
- Offsets could be utilized in promoting Baltic Sea wide cooperation
- National/City Pride & Prestige via verified abatement achievements
- HELCOM to provide status & visibility for such offsets

More info

<http://nutritradebaltic.eu/wp-content/uploads/sites/34/2018/05/NutriTrade-Policy-Brief-3-Nutrient-Offsets.pdf>

NUTRITRADE

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