




FEDERACJA
ZIELONYCH
GAJA
organizacja podmiotu publicznego
istniejąca od 1993 roku



Intensive and organic methods of livestock farming: influence of livestock farms on water ecosystems with example of Baltic Sea and solutions for the issue


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Definitions



- **Industrial animal production** – intensive rearing of livestock in specialized installations, which productively, organizationally and legally are closer to manufacturing facilities (enterprises, factories) than to farms.
- **IED (former IPPC) farms** – instalations for the intensive rearing of pigs and poultry with more than 2.000 pigs over 30 kg or 750 sows, or 40.000 places for poultry, that require integrated permits, in accordance with the EU Directive on industrial emissions (former Integrated Pollution Prevention and Control Directive).
- **Cattle, sheep, goats, horses and fur animals** large-scale breeding installations with equivalent number of livestock should also be consider.

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Definitions










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Statistical Data



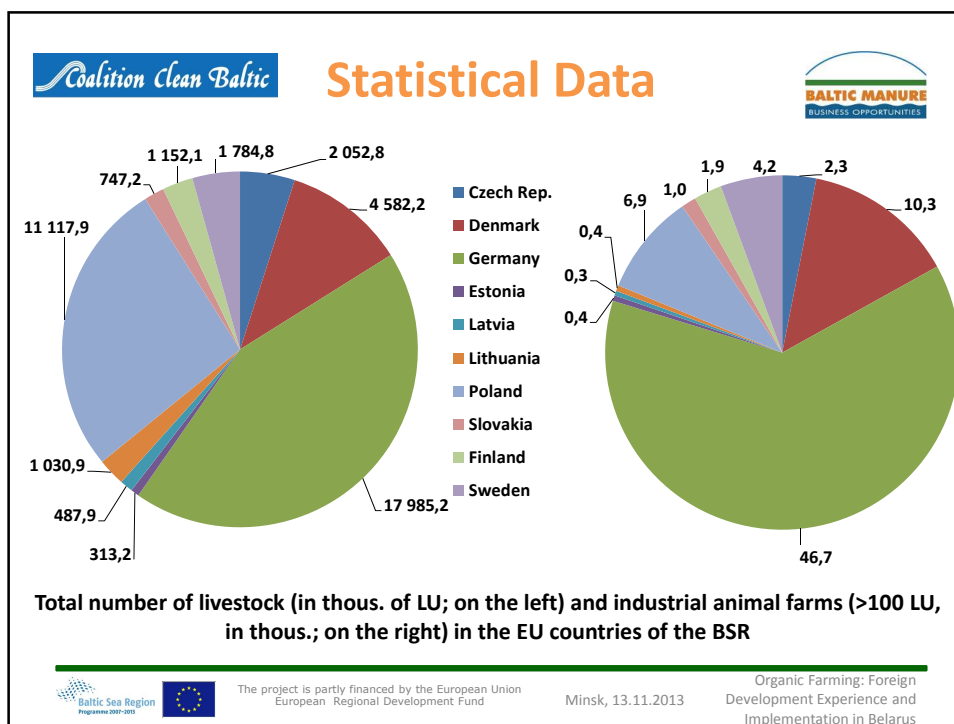
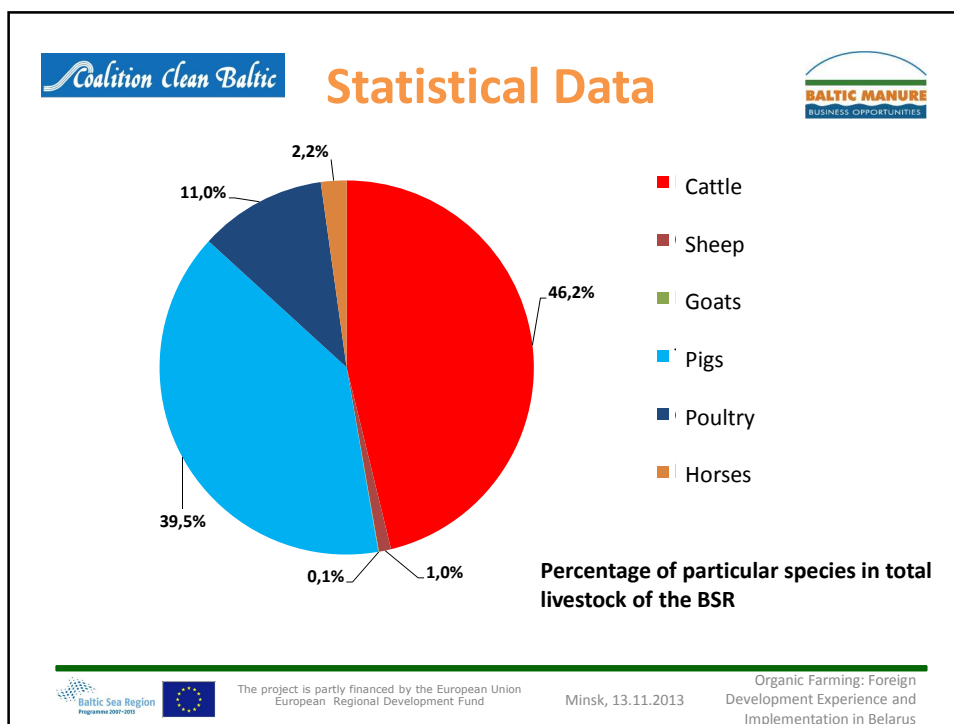
- about **67,3 millions** of pigs in the Baltic Sea catchment area,
- population of poultry amounts to about **189,8 millions**,
- app. **35,6 millions** of cows in the Baltic Sea catchment area,
- total livestock density in the EU countries of the BSR is equal to **40,4 millions** of LU,
- more than **1.320** IED farms in the Baltic catchment area,
- number of farms with more than 100 LU in the EU countries of the BSR amounts up to **74.400**.

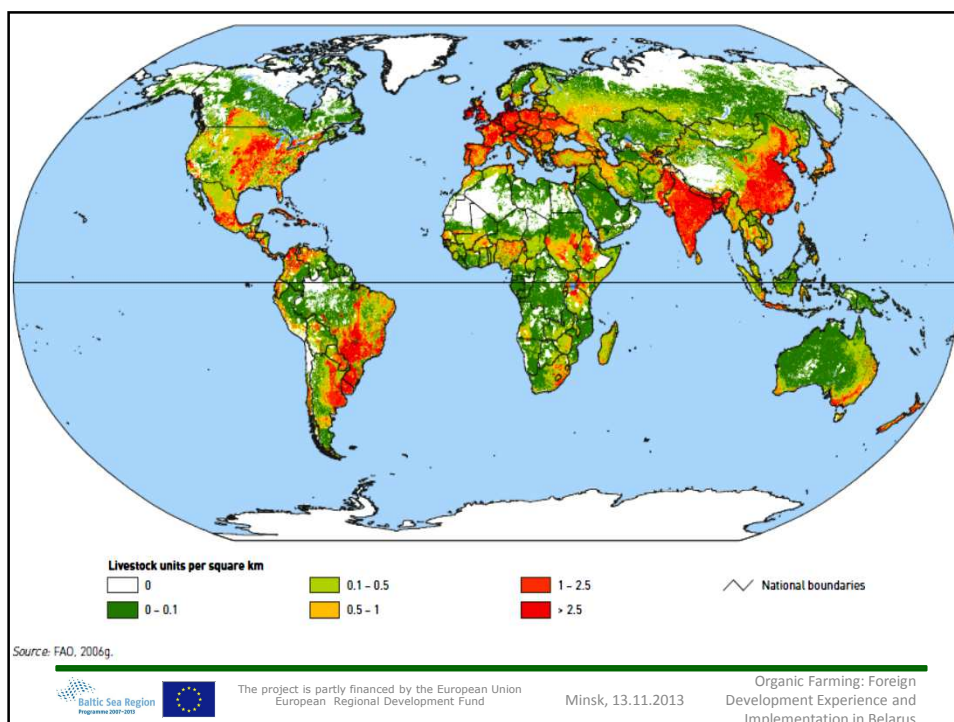




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Problems connected with industrial animal farming



A) ENVIRONMENTAL PROBLEMS

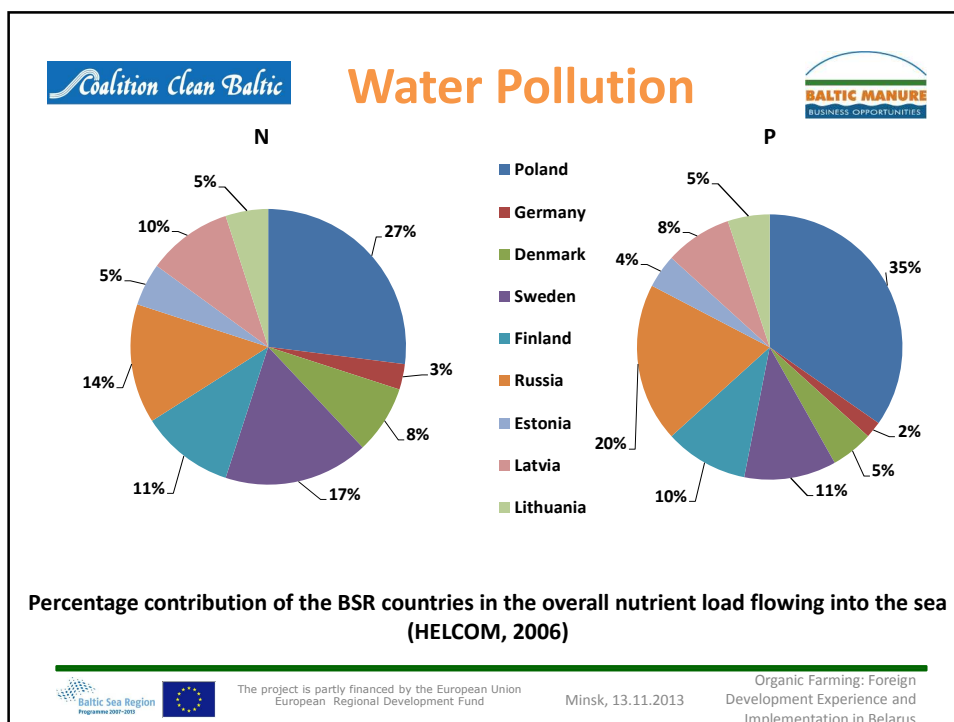
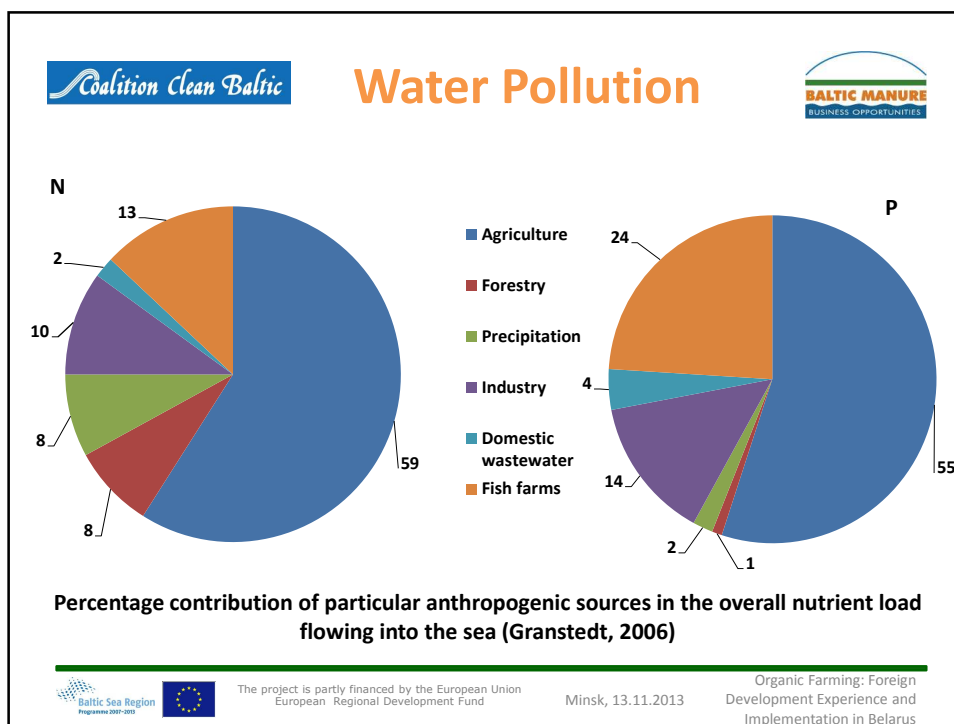
- **water pollution** – nitrogen and phosphorus leakage to the ground water, connected with **overfertilization**,
- eutrophication – “overfertilization” of inland and sea waters (algal blooms, decrease of fish population, ecosystems modifications, loss of bottom fauna, lack of oxygen in waters),
- microbiological pollution – *Staphylococcus sp.*, fecal streptococci, *Escherichia coli*, rubella bacilli, tubercle bacilli, foot-and-mouth disease viruses, various fungi and parasites,
- indirect effect that contributes to formation of acid rain and increased greenhouse effect (greenhouse gas emission harming the ozone layer).




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Eutrophication





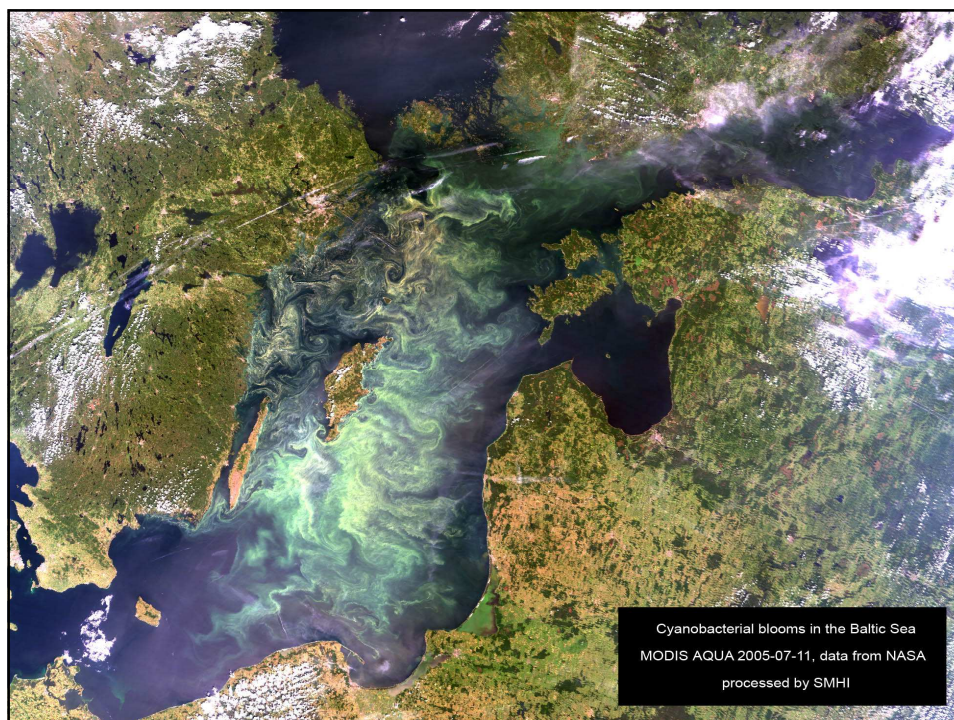
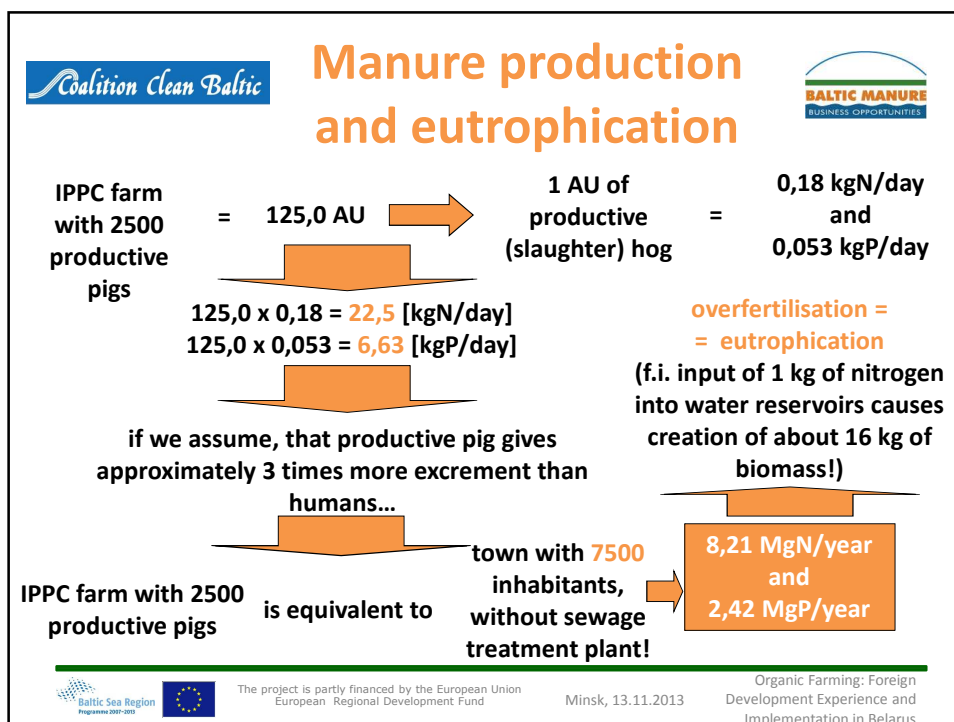


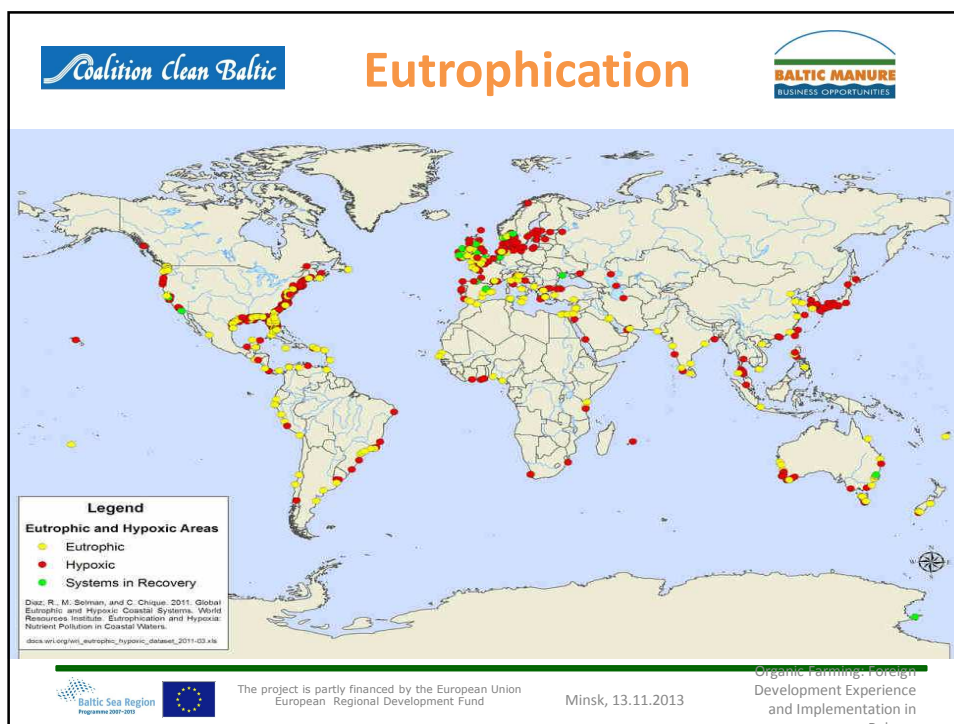
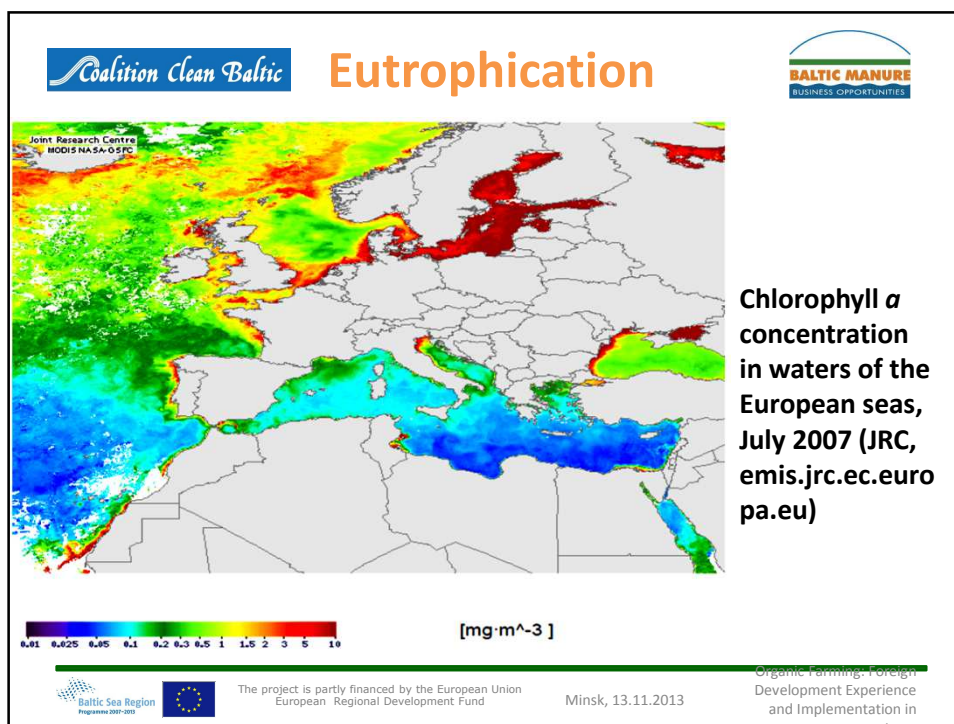



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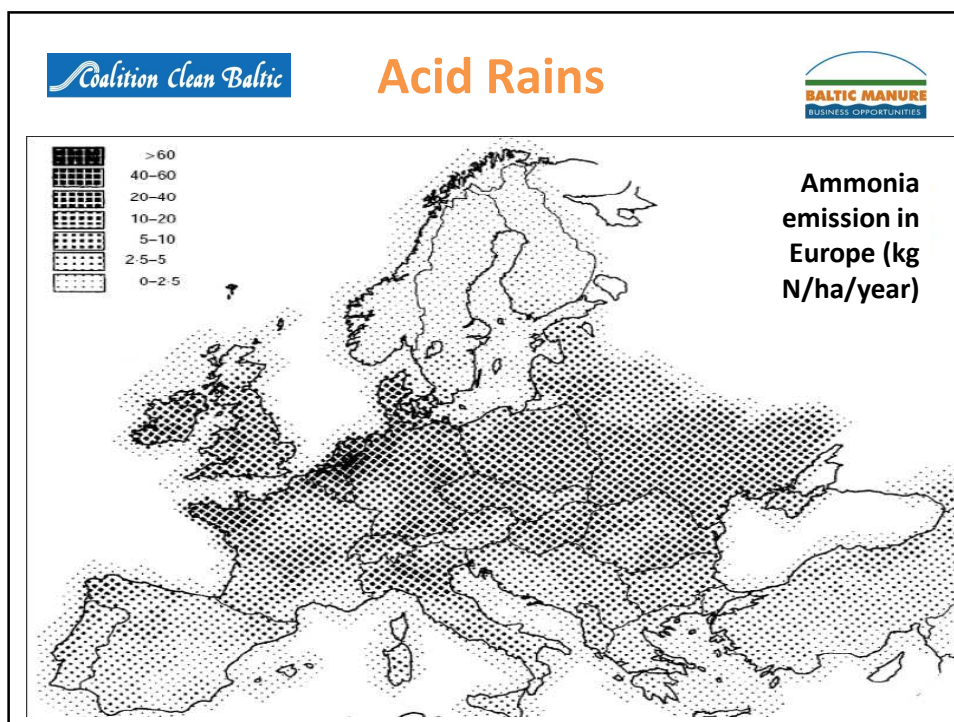
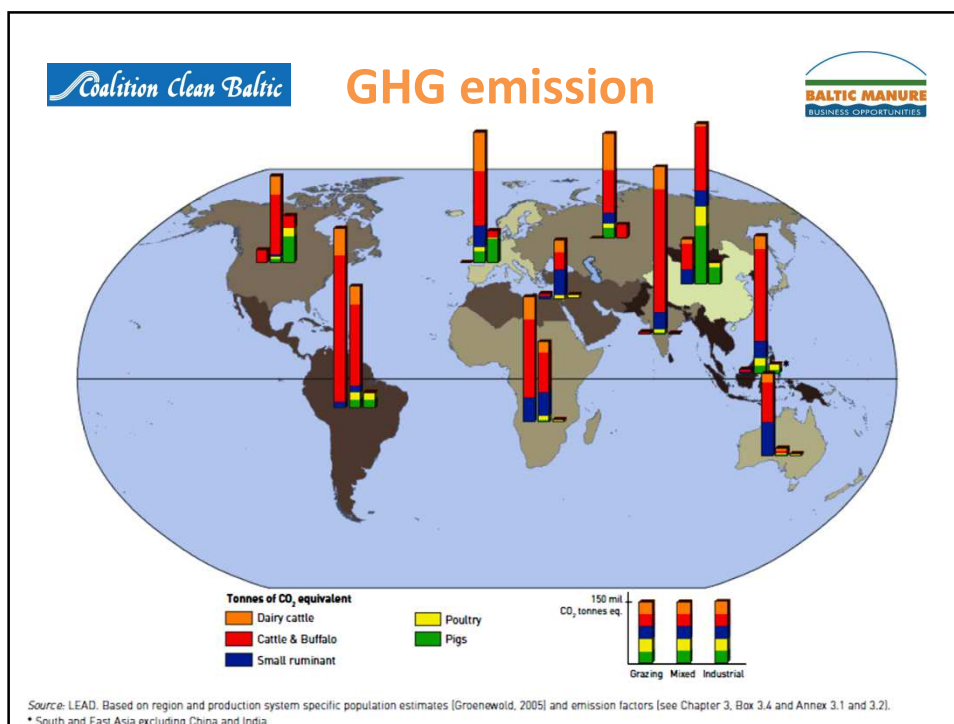
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Ozone Layer Destruction








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Farm Animals Escapes








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B) SOCIO-ECONOMIC PROBLEMS

- **air pollution** – ammoniac, hydrogen sulfide, carbonyl compounds, amines, mercaptans, dinitrogen monoxide causes offensive odours, danger for human health,
- **loss of recreation places,**
- **high costs of drinking water purification,**
- **degradation of cropland** – improper storage and usage of liquid manure,
- **farms' location** in direct neighborhood of **NATURA 2000** areas and different **protected or valuable areas** and the **Nitrate Vulnerable Zones**.



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C) LEGAL PROBLEMS


- **lack of fertilization plans,**
- **lack of permanent soil quality monitoring,**
- **Aarhus Convention** principles regarding access to environmental information are not followed,
- **deficiency of the Helsinki Convention implementation,**
- **lack of regulations concerning air odour quality.**




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Solutions?



- Secure a full implementation of the **Helsinki Convention** requirements for industrial animal farms.
- Monitor and control the implementation of the **IED Directive** on industrial farms.
- Execution of regular, independent **soil monitoring** in terms of nitrate contamination for farmland with high load of manure.
- Implementation of **odour air quality standard**.
- Promotion of **biotechnological methods** of manure utilisation (e.g. **biogas production**).
- Organic animal farming – **62** organic pig farms and **71** organic poultry farms in Poland.

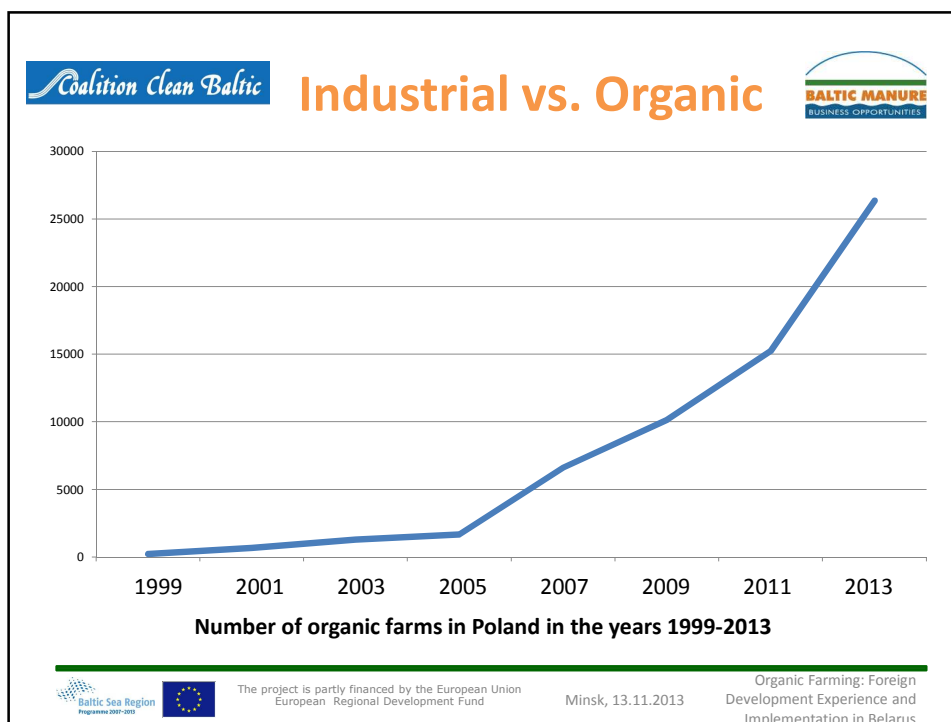


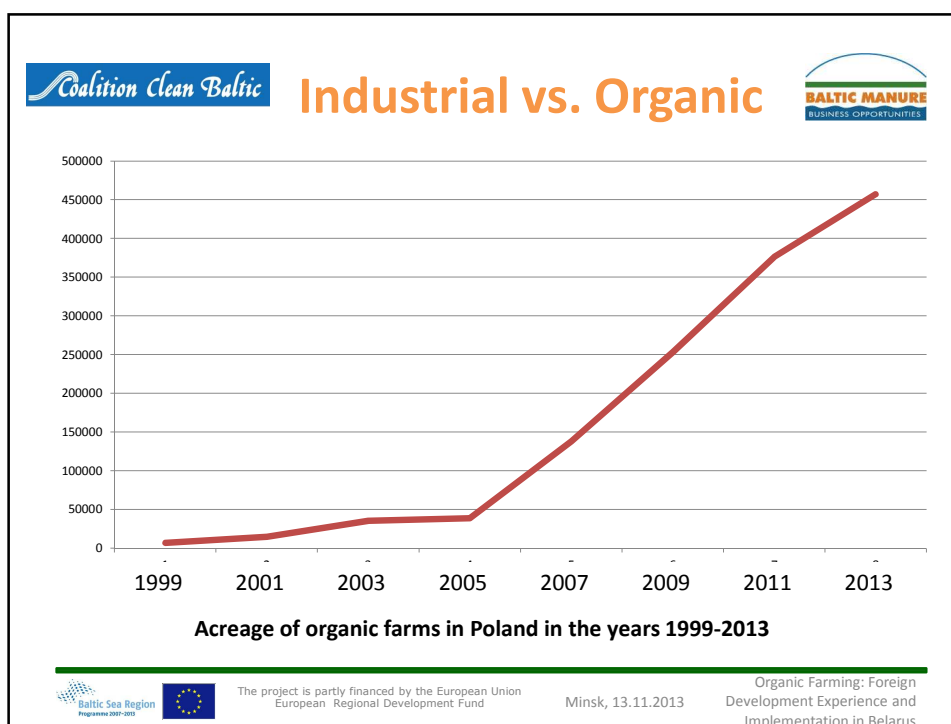


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Coalition Clean Baltic **Organic animal husbandry** **BALTIC MANURE BUSINESS OPPORTUNITIES**

- The animals fulfill the important role in organic farm: they improve and close the circulation of nutrients.
- Self-sufficiency feed-fertilizer allows stocking 0.5-1.5 LU/ha in organic agriculture.
- Animal welfare: livestock grazing in the summer and access to open air in winter: the animals must be able to move out of stable. The farm buildings should be provided with sufficient volume position, permanent access to water and food, adequate light and natural bedding.
- The animals rebuys must come from organic farms, they can be derived from conventional sources, but only under certain conditions – for procreation purposes.


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Organic animal husbandry



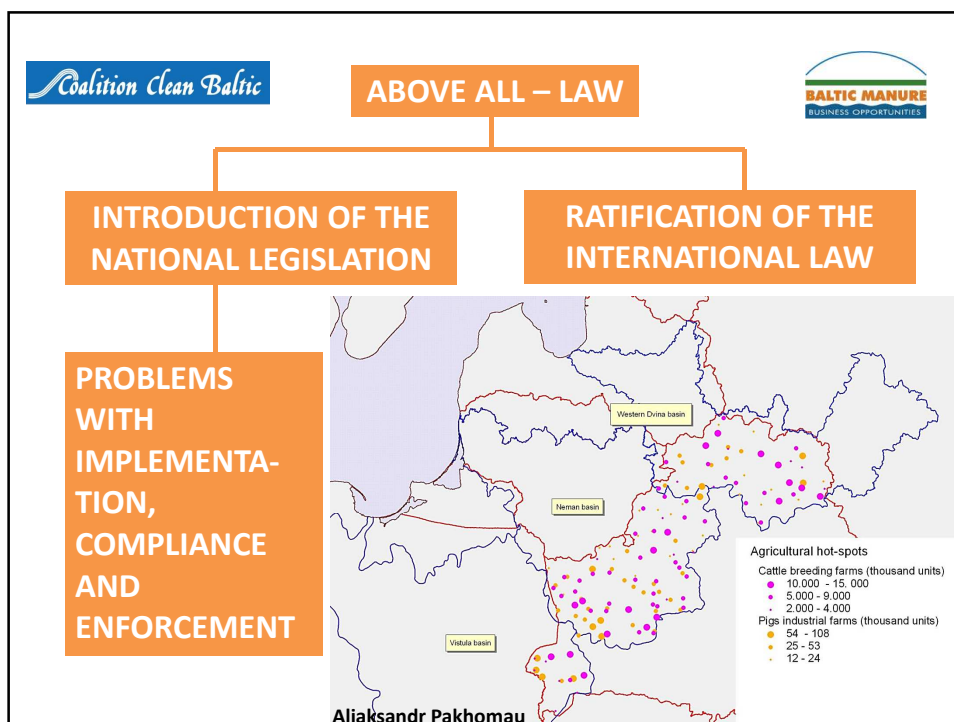
- Feed should be produced on the farm or becoming from other organic farms.
- Animal mutilation (castration, cutting sprouts, shortening their tails, etc.) are generally not permitted.
- Prophylactic administration of drugs is prohibited, and vaccinations allowed only if they are officially required.
- Conversion period of animals introduced into an existing ecological farm: 12 months in the case of horses, cattle for meat production, 6 months in the case of small ruminants and pigs and animals for milk production, 10 weeks for poultry for meat production, 6 weeks in the case of poultry for egg production.

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**Thank You for
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