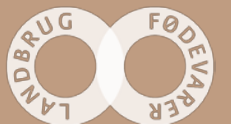


Nature protection, ammonia regulation and farming

A plea for proportionality

Workshop, University of Copenhagen 27 November 2017

SEGES



Theoretical and practical knowledge



- Winnie Heltborg Brøndum
- Specialist, Nature and farming
- SEGES, national knowledge centre in the Danish agricultural advisory service, DAAS

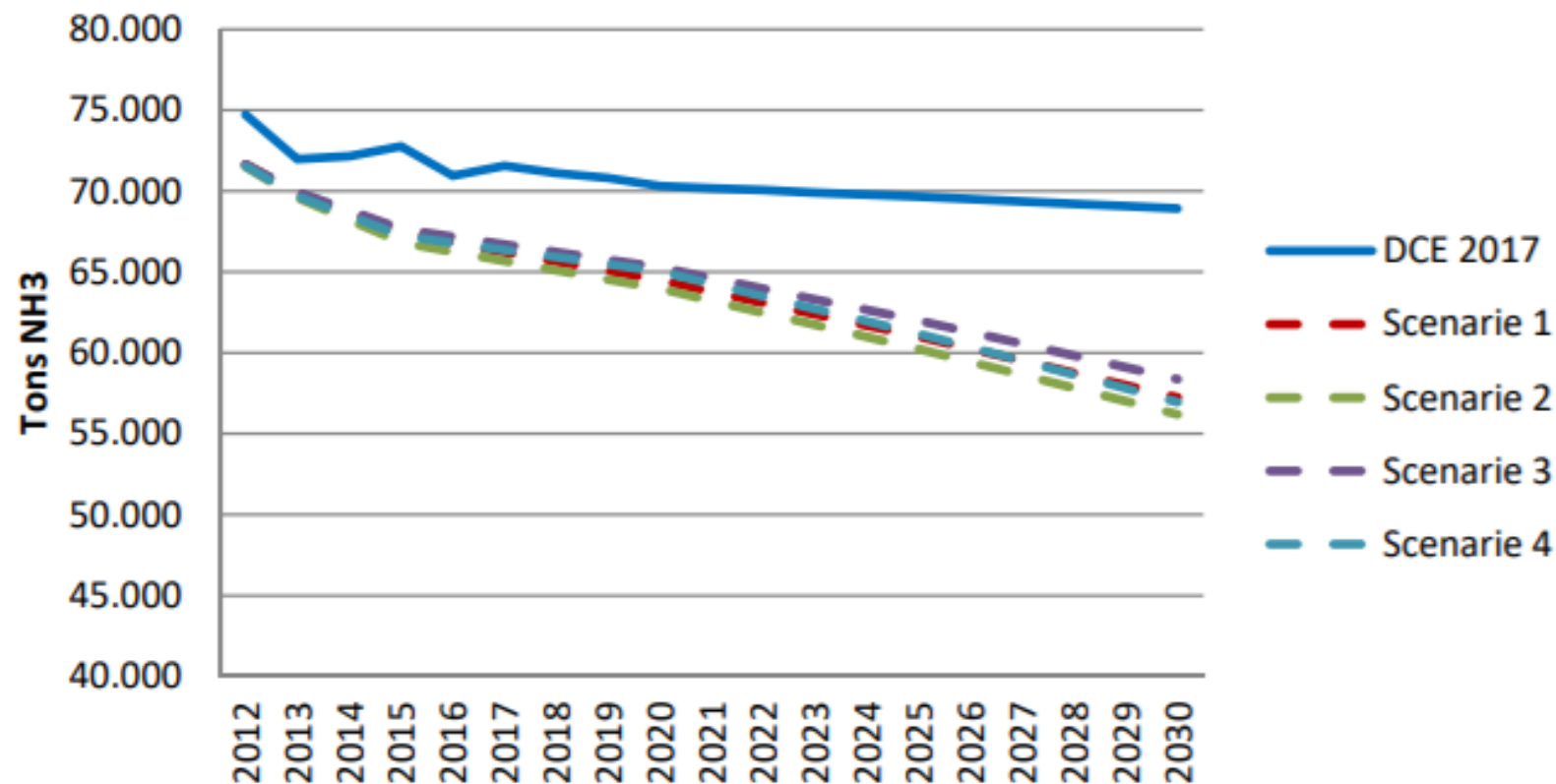


A plea for proportionality

- Elements of the ammonia emission regulation are not integrated
- Adopted as a general regulation with no compensation
- Can have very severe consequences for the specific farmers business
- Not directly integrated with nature management or restoration
- May have very little positive effect on the conservation status of nature

- A plea for a more integrated and holistic approach at the right scale,
 - could benefit nature and have much less consequences for farming

Scenarios for the ammonia emissions



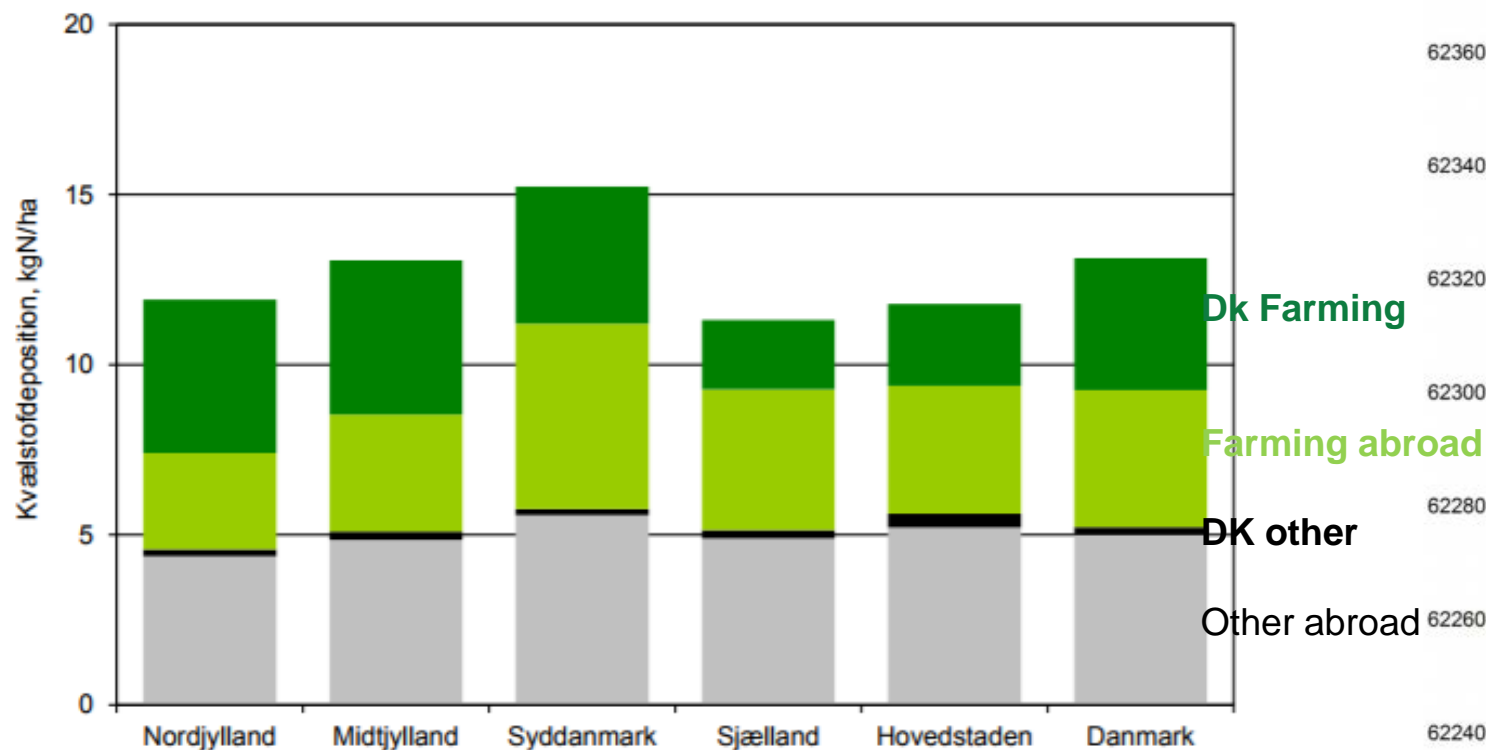
Illustrations of scenarios for the reductions in ammonia emissions from agriculture

NEC directive reduction demand in 2020 is 24 % of the 2005 level

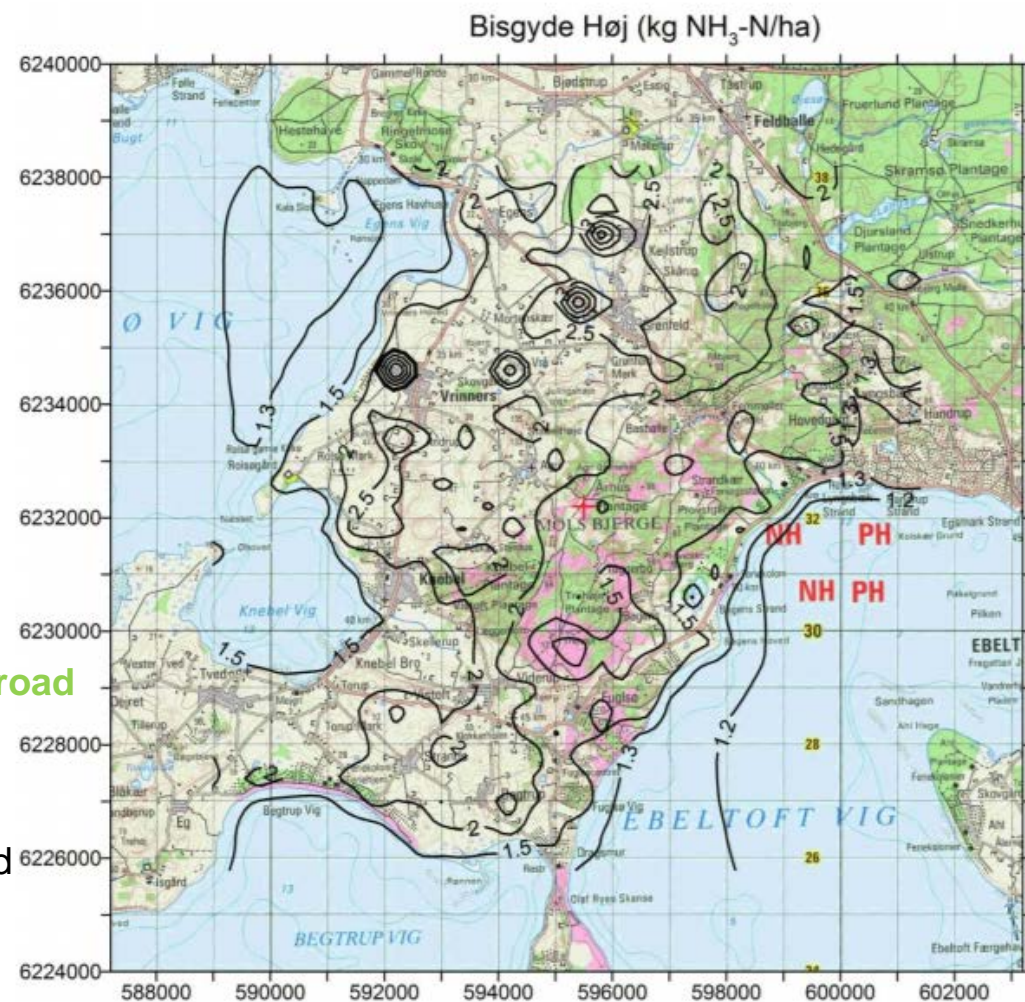
IFRO scenarios 1- 4 (2014)

DCE scenarios (2017)

Deposition scenarios?



Total N depositions to different regions of Denmark 2015. Source: AU, DCE



Local scale dry-ammonia depositions 2015. Source: AU, DCE

Case

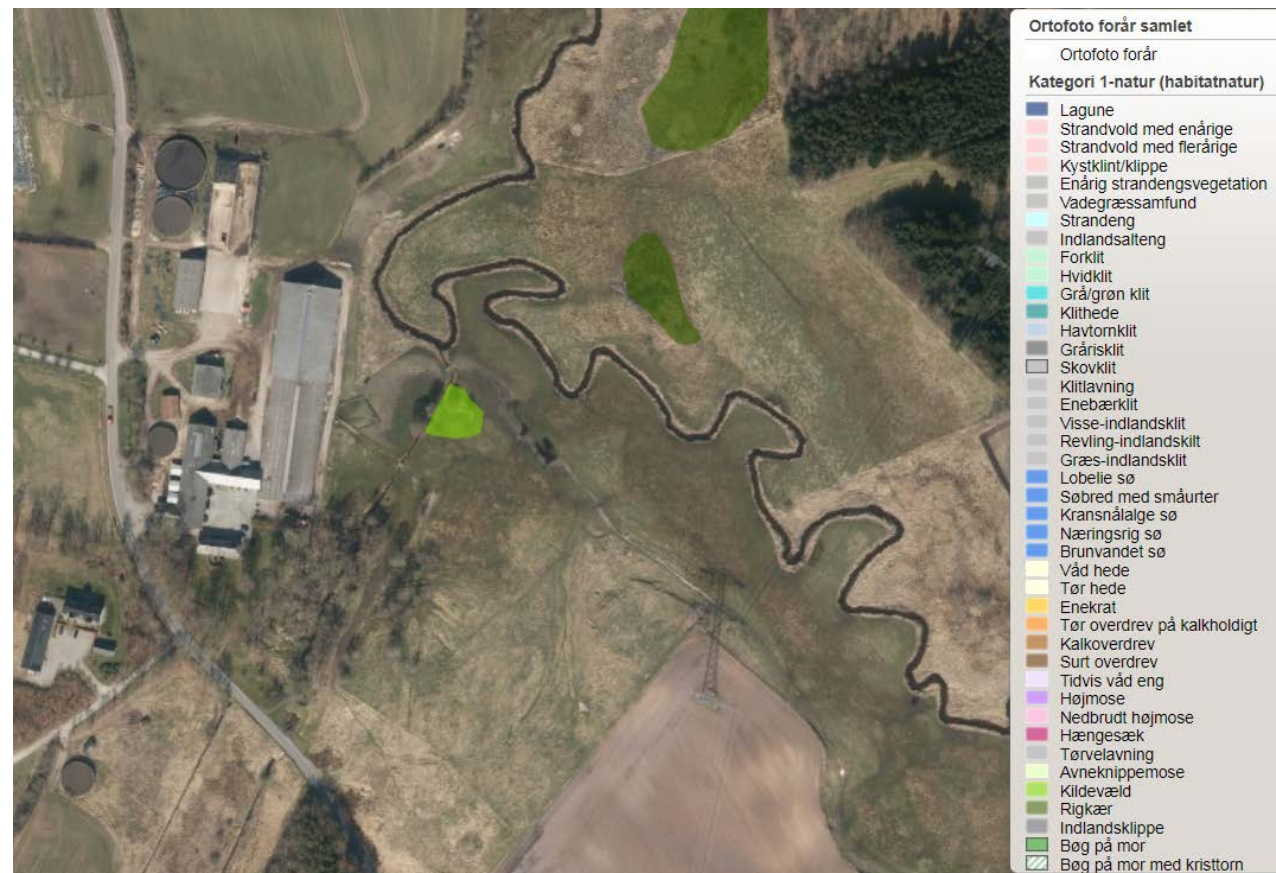


Carl Lyngs har flere gange haft besøg af Landbrug & Fødevarer, som led i organisationens arbejde med sagen. Her ses han sammen med miljøchef Anette Christiansen. Foto: Ida Storm

- 6210 grassland (not priority)
- 0,7 ha
- Is legally fertilised
- Is owned and managed by the farmer
- Had his latest permit in 2010
- Applied for expansion/modernisation of the farm in 2013
- Would lead to a reduction in the deposition from 2,3 – 1,7 kg N/ha/year

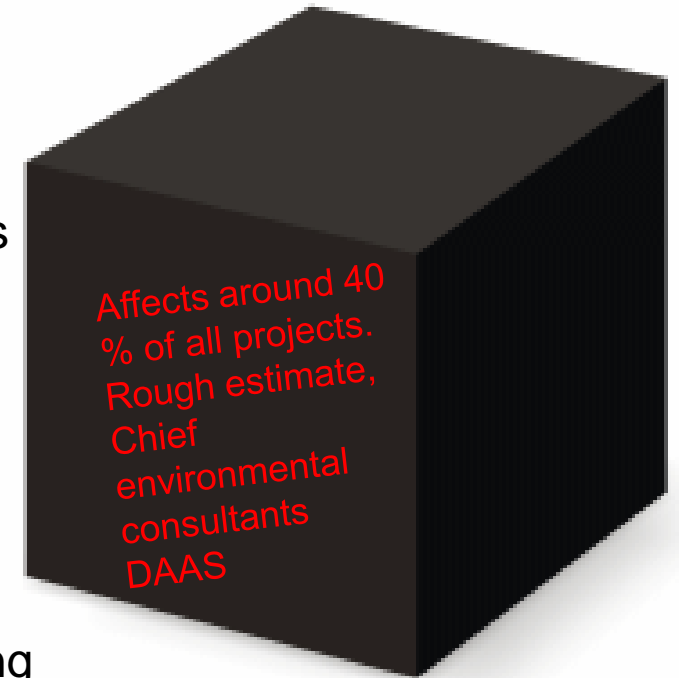
Case

- Permit for 250 dairy cows in 2005
- Reassessed in 2014
- Very close to 7220 * petrifying spring
- Permit threshold of 0,7 kg N/ha/year
- Very few possibilities for changes of any kind at the farm
- Immediate loss of market value
- Production will be maintained as long as possible to "pay the bills"

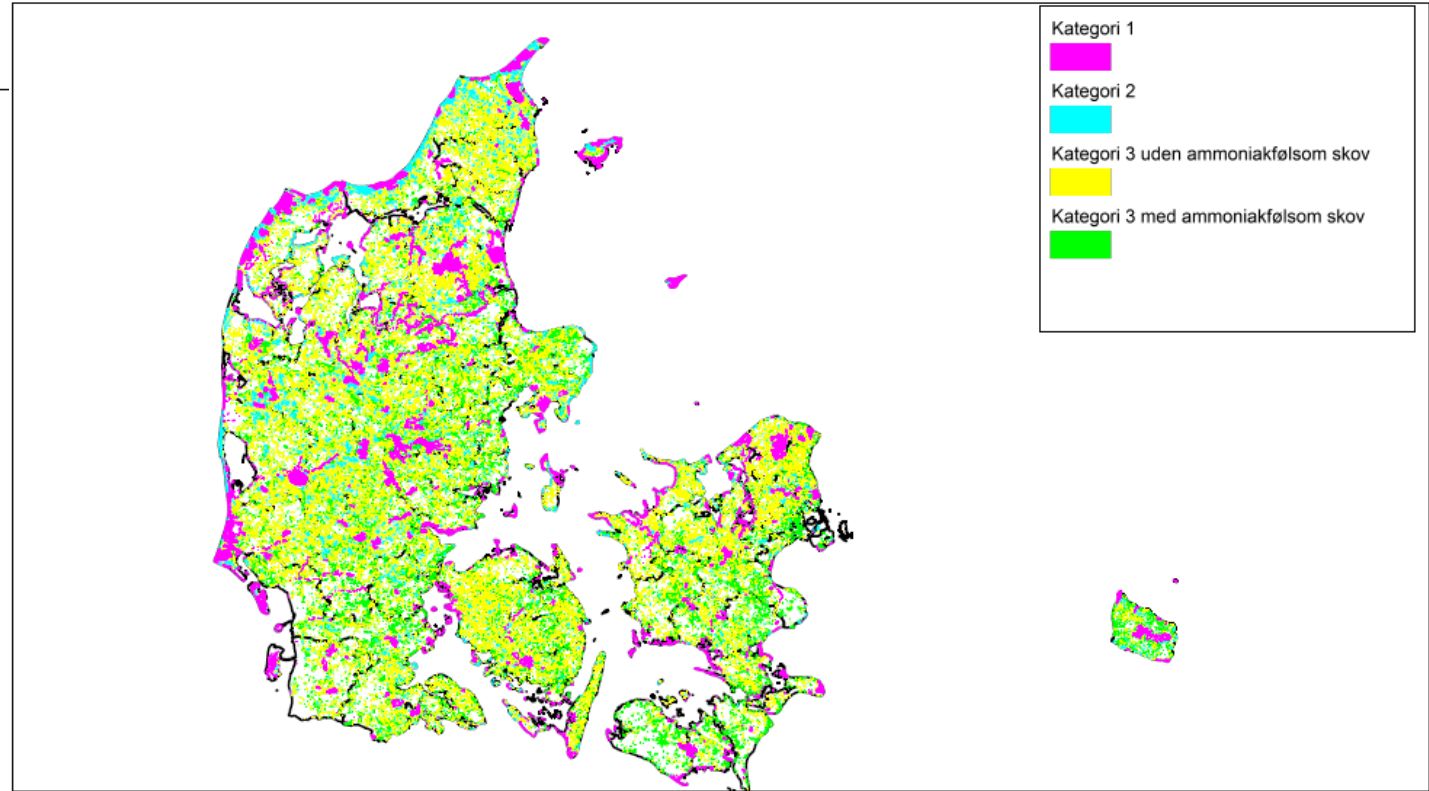
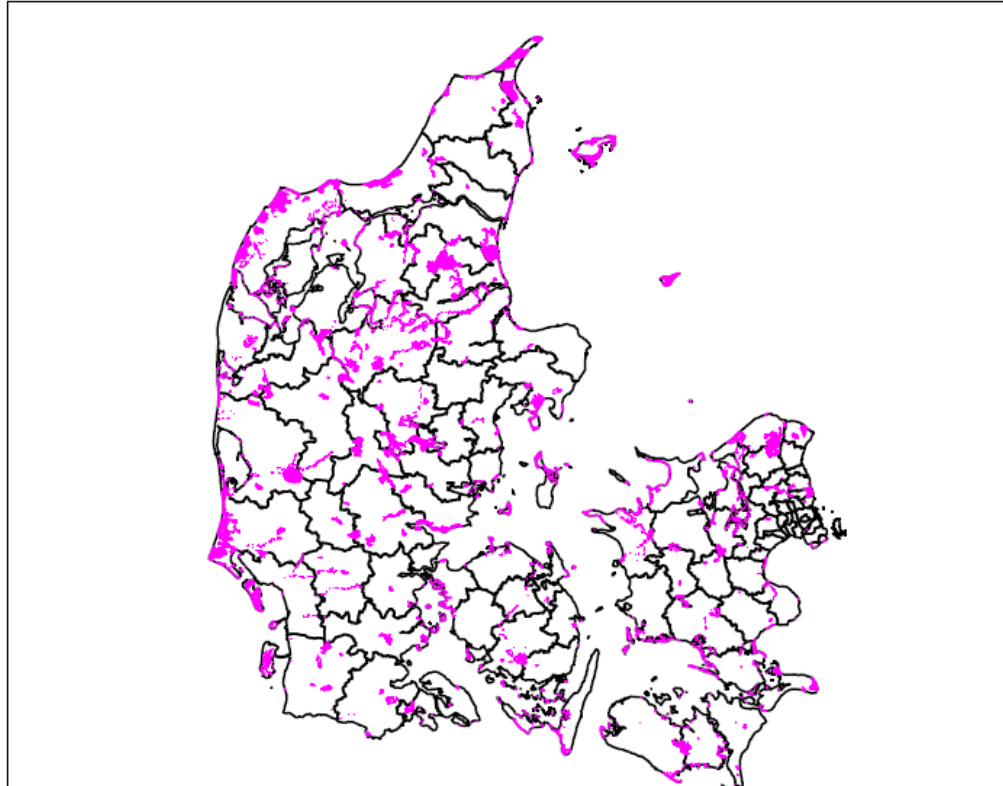


Ammonia regulation includes nationally protected areas

- The national protected habitats are not clearly defined by law
- These are not designated but protected "by appearance"
- Danish Nature Act holds a ban against alterations to the protected habitats
- No clear limits to what an alteration is?
- A fairly large proportion is privately owned
- There is no obligation to manage privately owned habitats
- There are no specific tools developed to estimate the critical load protecting against "to much alteration"
- Individual assessment....



Locating or relocating farms is difficult – and obstacles cannot be foreseen



A disproportionate focus on ammonia



- Designated as "partly" a raised bog
- Raises the area to a category 2 threshold
- Total dep 20 kg N/ha/year
- Background 17 kg N/ha/year
- Drained for decades
- Grazed or cut
- Owned by the farmer

Thoughts of scale, integration and a more holistic approach

- Focus on a landscape scale, not the specific habitat
- Include management history, plans and prognoses
- Buy and close farms with highly problematic locations
 - Outdated, high emission farms in nature dense area
- Adopt the possibility to exchange emission regulation with area specific management plans
 - Maybe even in another area
- Create room for development in less/not problematic locations
 - Investment motivations for modern low emission production systems