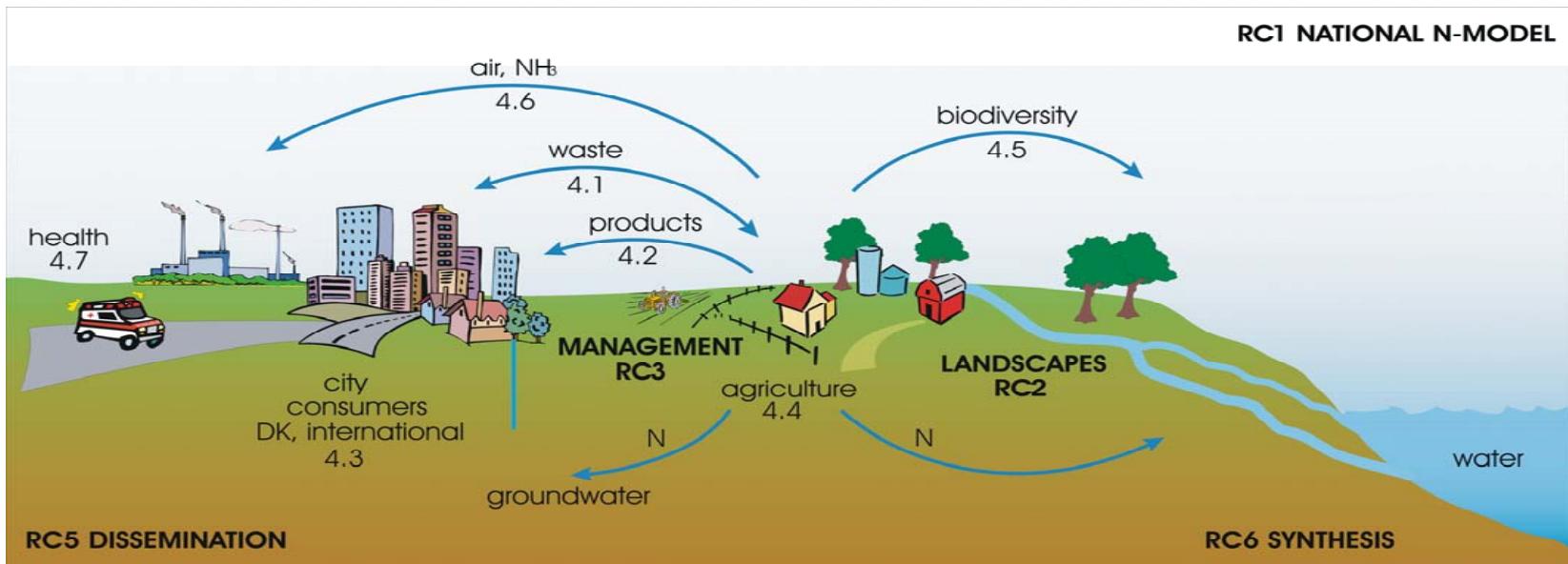


Welcome to the 3rd DNMARK Annual Meeting



by Tommy Dalgaard

Aarhus University, Department of Agroecology.

Danish Nitrogen Mitigation Assessment: Research and Know-how for a sustainable, low-Nitrogen food production

3rd Annual Meeting: Nyminddegab Kro, Varde, March 9-10 2015.



Special welcome to *new participants in the annual meeting*



Danish Nitrogen Mitigation Assessment: Research and Know-how for a sustainable, low-Nitrogen food production
3rd Annual Meeting: Nyminddegab Kro, Varde, March 9-10 2015.



Program

- 9:00 Welcome by mayor Erik Buhl Nielsen
- 9:15 Morning program
 - Short project status and board meeting report (Tommy)
 - Results from the pilot project on new land area regulation (by Nikolaj Ludvigsen, Danish EPA, and Irene Wiborg, SEGES)
 - Nitrogen measurement results from the Hagens Møllebæk dNmark study site in Skive (by Jane Bang Poulsen, AU Bioscience).
- 10:15 Coffee Break
- 10:30 Research Component presentations
 - 10:15 Solution scenarios (Jørgen E. Olesen, RC1 and RC6)
 - 10:35 Local workshops, and the Landscape scenario GIS platform (Henrik Vejre, Peter Stubkjær and Andreas Aagaard, RC2).
 - 11:00 Targeted regulation – cost effectiveness modelling by different approaches (Brian Jacobsen and Berit Hasler, RC3)
 - 11:45 Discussion and summary (Chaired by Jørgen E Olesen)
- 12:00 Lunch

Program

- 12:50 PhD/post-doc café (RC4)
 - 12:50 Short introduction by Berit Hasler
 - 12:55 Café table workshop where dNmark-experiments are introduced
(Café table holders: PhD and post docs)
- 14:00 Short break
- 14:10 Results dissemination and real world implementation.
(Irene, RC5)
 - Communication plan presentation and approval
 - Brain storm in groups: Ideas for dNmark spin off activities
- 14:45 Wrap-up: dNmark activities for the coming year
(Tommy, RC6)
 - International workshop and dNmark bi-annual meeting in Aarhus,
October 5-6 2015
 - Next dNmark annual meeting in Foulum, March 14-15 2016
- 15:00 Good bye and coffee

PhD og post-doc café



PhD og post docs præsenterer, vi andre deltager!

2 cafebesøg/gruppediskussioner:

- 1) 12.55- 13.25: 1.besøg
- 2) 13.30 – 14.00: 2. besøg

Café-borde:

- Bord 1: Anne Kejser Jensen: Estimating benefits of improved water quality.
- Bord 2: Line Blok Hansen: Spørgeskema om landmænds holdninger til kvælstofproblematikken, kvælstof-tiltag og om samarbejde mellem landmænd om implementering af kvælstof-tiltag.
- Bord 3: Sean Case: Hvilke organiske godtninger foretrækker landmænd?
- Bord 4: Peter Stubkjær: Scenarier, erfaringer fra 5 workshops
- Bord 5: Sandy og Morten: Questionnaire on meat consumption

1. runde, 30 minutter

Mødeum	Konferencerum, 4 borde			
Bord 1: Anne	Bord 2: Line	Bord 3 Sean	Bord 4: Peter	Bord 5:Sandy & Morten
Tommy Dalgaard	Jørgen Olesen	Nick Hutchings	Ib Kristensen	Chris Keldsen
Inge Kristensen	Mette Vestergaard	Lars Stoumann	Jan Schørring	Henrik Vejre
Andreas Aagaard	Per Gundersen	Brian Jacobsen	Jørgen Dejgaard	Berit Hasler
Mette Termansen	Hans Estrup	Steen Brock	Jane Bang Poulsen	Torben Sigsgaard
Nanna Linn Jensen	Anker Højbjerg	Irene Wiborg	Kristoffer Piil	Frank Oudshorn
Poul Vadsholt	Camilla Lomholdt	Bent Ib Hansen	Hanne Bligaard	Erik E. Olesen
Sune Aa. Sckerl	Jørgen Enevoldsen	Marianne Dyhrberg	Michael Bay	Rasmus K. Andreasen
Jacob Møgelvang	Nikolaj Ludvigsen	Mogens Nielsen	Per Grønvald	Susanne Hjuler
		Peder Thomsen		

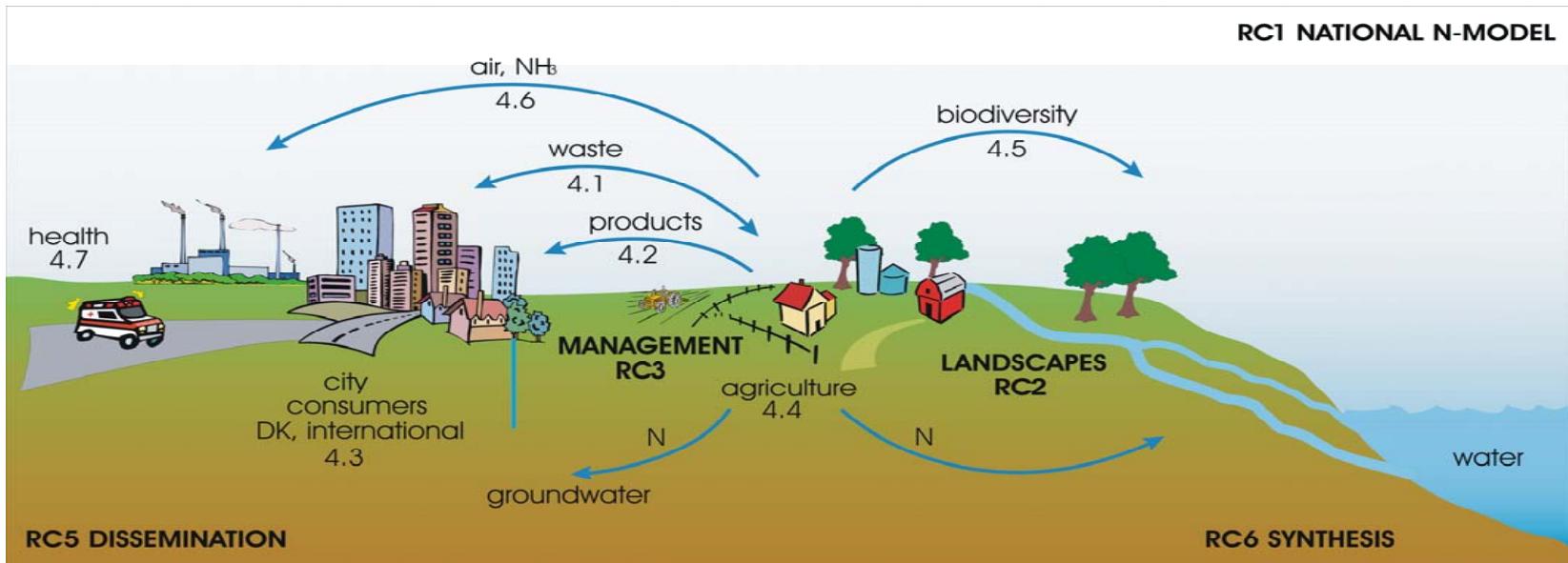
2. runde 30 minutter

Mødeum	Konferencerum, 4 borde			
Bord 1: Anne	Bord 2: Line	Bord 3 Sean	Bord 4: Peter	Bord 5:Sandy & Morten
Chris Keldsen	Tommy Dalgaard	Jørgen Olesen	Nick Hutchings	Ib Kristensen
Mette Vestergaard	Lars Stoumann	Henrik Vejre	Jan schørring	Inge Kristensen
Per Gundersen	Andreas Aagard	Berit Hasler	Brian Jacobsen	Jørgen Dejgaard
Hans Estrup	Jane Bang Poulsen	Torben Sigsgaard	Steen Brock	Mette Termansen
Kristoffer Piil	Irene Wiborg	Frank Oudshorn	Anker Højbjerg	Nanna Linn Jensen
Hanne Bligaard	Erik E. Olesen	Camilla Lomholdt	Poul Vadsholt	Bent Ib Hansen
			Rasmus K.	
Michael Bay	Jørgen Enevoldsen	Sune Aa. Sckerl	Andrasen	Marianne Dyhrberg
Mogens Nielsen	Jacob Møgelvang	Susanne Hjuler	Nikolaj Ludvigsen	Per Grønvald
Peder Thomsen				

Program

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Short project status and board meeting report



The Board

Danish Nitrogen Mitigation Assessment: Research and Know-how for a sustainable, low-Nitrogen food production

3rd Annual Meeting: Nyminddegab Kro, Varde, March 9-10 2015.



Status

dNmark
research alliance

		DNMARK project work plan and timeline										Updated March 2015. Changes from original in red=2014 and blue=2015)									
RC	Tasks:	2013				2014				2015				2016				2017			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	National N-model																				
1.1	National N-budget		M1.1								M 1.4										
1.2	Agr. N-budget disaggregation		M1.2					(M 1.5)							M 1.6						
1.3	National scenarios														M 1.5						
2	Landscape																				
2.1	Landscape inventory					M2.1		(M2.1)													
2.2	Local scenarios						M2.2	M2.3	(M2.2)							M2.4					
2.3	Ecosystem service externalities														M2.5			M2.6	M2.7		
3	Management strategies																				
3.1	Cost-effectiveness scenarios									M3.1											
3.2	Spatial model framework									M3.2					M3.3	M3.4					
3.3	Subsidy scheme evaluation														M3.5	M3.6		M3.7			
4	Critical N impact issues																				
4.1	Urban-rural waste N-cycling				M4.1a	M4.1b					M4.8						M4.21				
4.2	Cost benefits of N measures				M4.2						M4.9					M4.15	M4.22	D4.2			
4.3	Sustainable food consumption		M4.3							M4.10					M4.16	M4.23, D4.3					
4.4a	Watershed N Management							M4.4a			M4.11a					M4.17a	M4.24a				D4.4a
4.4b	Spatial N mitigation assessment							M4.4b			M4.11b					M4.17b	M4.24b		D4.4b		
4.5	N mitigation & Ecosyst Services	M4.5								M4.12					D4.5	M4.18	M4.25				
4.6	Air N pollution & public health			M4.6						M4.13						M4.19	M4.26	D4.6			
4.7	Groundwater N pollut & health			M4.7						M4.14						M4.20	M4.27	D4.7			
4.8	Geographically targeted scenarios														M4.30		M4.28				
4.9	Landscape GIS scenario platform														M4.31		M4.29				
5	Dissemination																				
5.1	Communication Strategy	M5.1	M5.2		M5.3	M5.4									M5.5		M5.6		M5.7		
5.2	Local dissemination	M5.7			M5.8					M5.9						M5.10		M5.11			
5.3	National dissemination	M5.1		M5.13				(M5.14)							M5.15		M5.16	M5.17			
5.4	International dissemination					M5.18				M5.19						M5.20		M5.21	M5.22		
6	Proj. management & synthesis																				
6.1	Solution Scenario workshops		M6.1		M6.2	M6.3	M6.3a		M6.3b						M6.4		M6.5		M6.6		
6.2	Project meetings and reporting	M6.7	M6.8, M6.18		M6.9, M6.23		M6.10, M6.19		M6.11, M6.24						M6.12, M6.20	M6.13, M6.25	M6.14, M6.21	M6.15, M6.26	M6.16, M6.22	M6.17, M6.27	
6.3	Danish Nitrogen Assessment															M6.28		M6.29			

Local workshops

(approx. number of participants)

- Gjøl (15)
- Skive (30)
- Lammejorden (18)
- Varde (25)
- Tissø (25)
- Aalborg (45)

+ more to come!



DNMARK pilot areas



DNMARK » 4a. Arealanven... dnmark.org/?page_id=1307

dnmark research alliance

4a. Arealanvendelse

Den primære arealanvendelse ved Varde er intensivt landbrug (55,2%) efterfulgt af naturarealer som vand, skov og åben natur (29,7%) og urbane områder (10,5%) (kort og tabel). Området repræsenterer derved sammen med Tissø (43%) de områder, der indeholder mest natur af alle pilotområderne (figur). Den store andel natur skyldes bl.a. Blåbjerg klitplantage i den nordvestlige del og den nyligt genoprettede Filsø (år 2012).

Arealanvendelsen er illustreret på kortet og i den tilhørende tabel for Varde nedenfor. Endvidere er arealanvendelsen for de 7 pilotområder illustreret samlet i figuren nedenfor.

Kategori	Varde (%)	Tissø (%)
Landbrug	55,2%	43%
Åben natur uden for landbruget	29,7%	43%
Vand	10,5%	10,5%
Urbane områder	10,5%	10,5%

Se også ▾

- Nyheder
- Om DNMARK
- Forskningspakker
- Pilotområder
- 1. Gjøl
- 2. Aalborg syd
- 3. Hagens Møllebæk
- 4. Varde
- 4a. Arealanvendelse
- 4b. Jordbundsforhold
- 4c. Terræn
- 4d. Hydrologi
- 5. Lammefjorden
- 6. Tissø
- 7. Nordsminde Fjord
- Fakta om N
- Løsningsscenarier

Om forskningsalliancen ▾

Folder på dansk om projektet (get english version [here](#))

DNMARK er finansieret af en fem-årig bevilling fra Det Strategiske Forskningsråd

DNMARK pilot areas

DNMARK » Pilotområder dnmark.org/?page_id=148 Search

Pilotområder

Det er vigtigt for allianceen at udvikle og teste løsninger i tæt samspil med en bred vifte af aktører fra forskellige dele af landet. Et vigtigt fokusfelt er Limfjordsområdet. Her vil allianceen arbejde i blandt andet Skive og Jammerbugt kommuner. Desuden vil allianceen arbejde med aktører fra Varde, Horsens og Odsherred kommuner.

Se også >

- Nyheder
- Om DNMARK
- Forskningspakker
- Pilotområder
- 1. Gjel
- 2. Aalborg syd
- 3. Hagens Møllebæk
- 4. Varde
- 5. Lammefjorden
- 6. Tissø
- 7. Nordsminde Fjord

Om forskningsalliancen >

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Det Strategiske Forskningsråd

InnovationsFonden

Dissemination (Formidling)

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- Mineral-cycles.eu Conference,
Brussels december 2014
- A Sustainable Future for
EU Farming conference,
Brussel, March 2015
- Invited N-print Workshop:
Sapporo, Japan, March 2015
- International Nitrogen Conferences
(N2013 and N2016)
- An many publications
records listed....



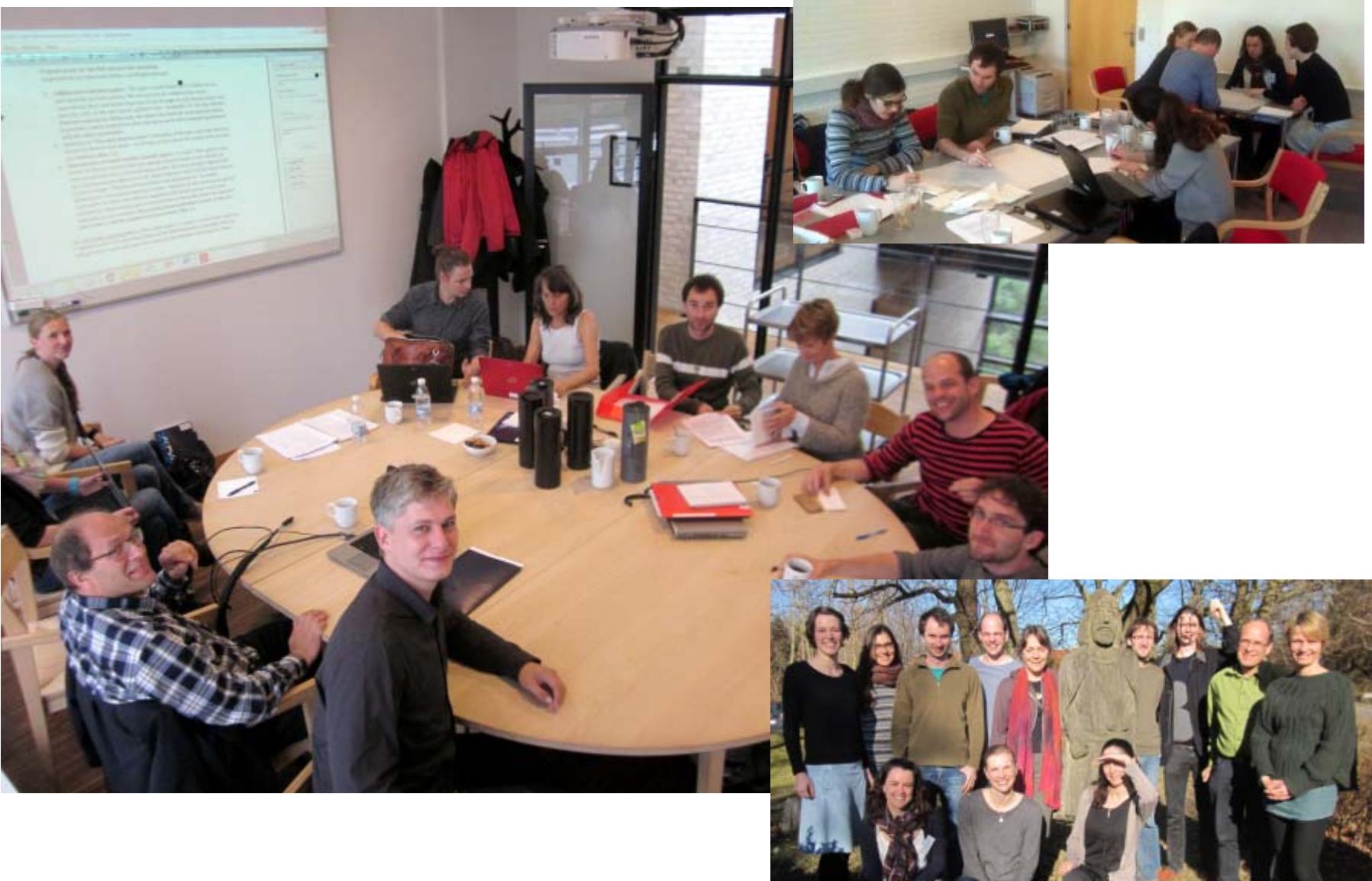
Bi-annual meeting Oct 2014 with international experts

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research alliance



Solutions scenario and PhD/post-doc workshops

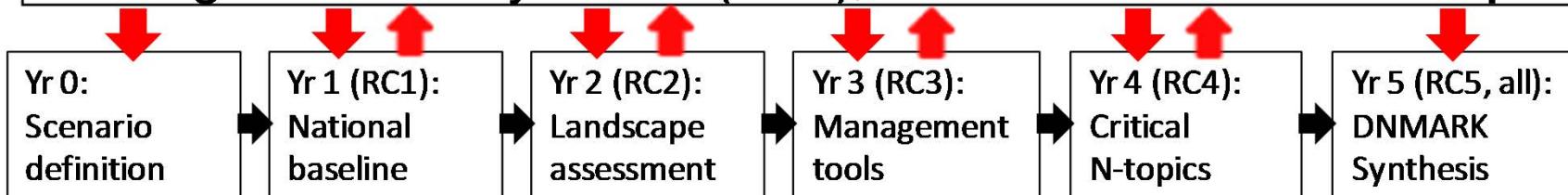
dNmark
research alliance



Status

RC	Tasks:	DNMARK project work plan and timeline										updated March 2015. Changes from original in red=2014 and blue=2015)											
		2013				2014				2015				2016				2017					
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
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5.1	Communication Strategy	M 5.1	M 5.2		M 5.3		M 5.4							M 5.5		M 5.6		M 5.7					
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5.3	National dissemination	M5.1		M5.13					(M5.14)					M5.15		M5.16		M5.17					
5.4	International dissemination					M5.18				M5.19					M5.20		M5.21	M5.22					
6	Proj. management & synthesis																						
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6.2	Project meetings and reporting	M6.7	M6.8, M6.18		M6.9, M6.23		M6.10, M6.19		M6.11, M6.24					M6.12, M6.20		M6.13, M6.25		M6.14, M6.21		M6.15, M6.26	M6.16, M6.22	M6.17, M6.27	
6.3	Danish Nitrogen Assessment															M6.28						M6.29	

Management and synthesis (RC6); solution scenario workshops



Annual meetings in Varde, Odsherred, Skive and Horsens

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Disebjerg, Fårevejle

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Hagens Møllebæk

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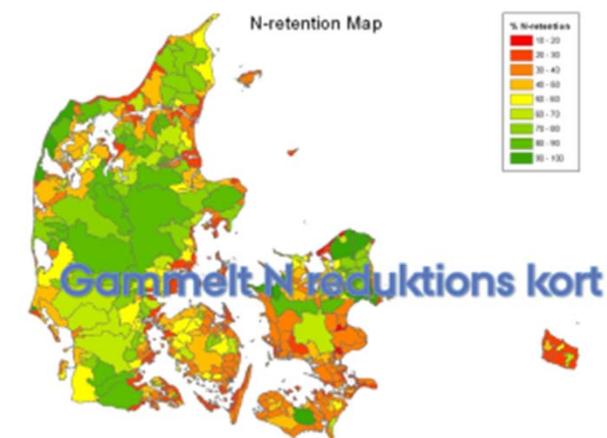
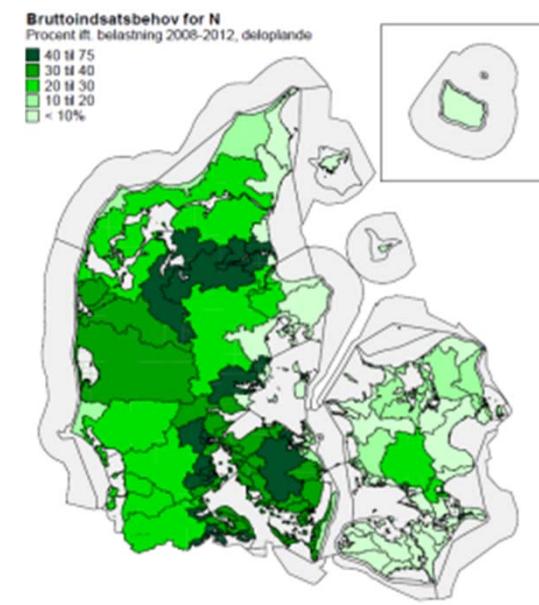
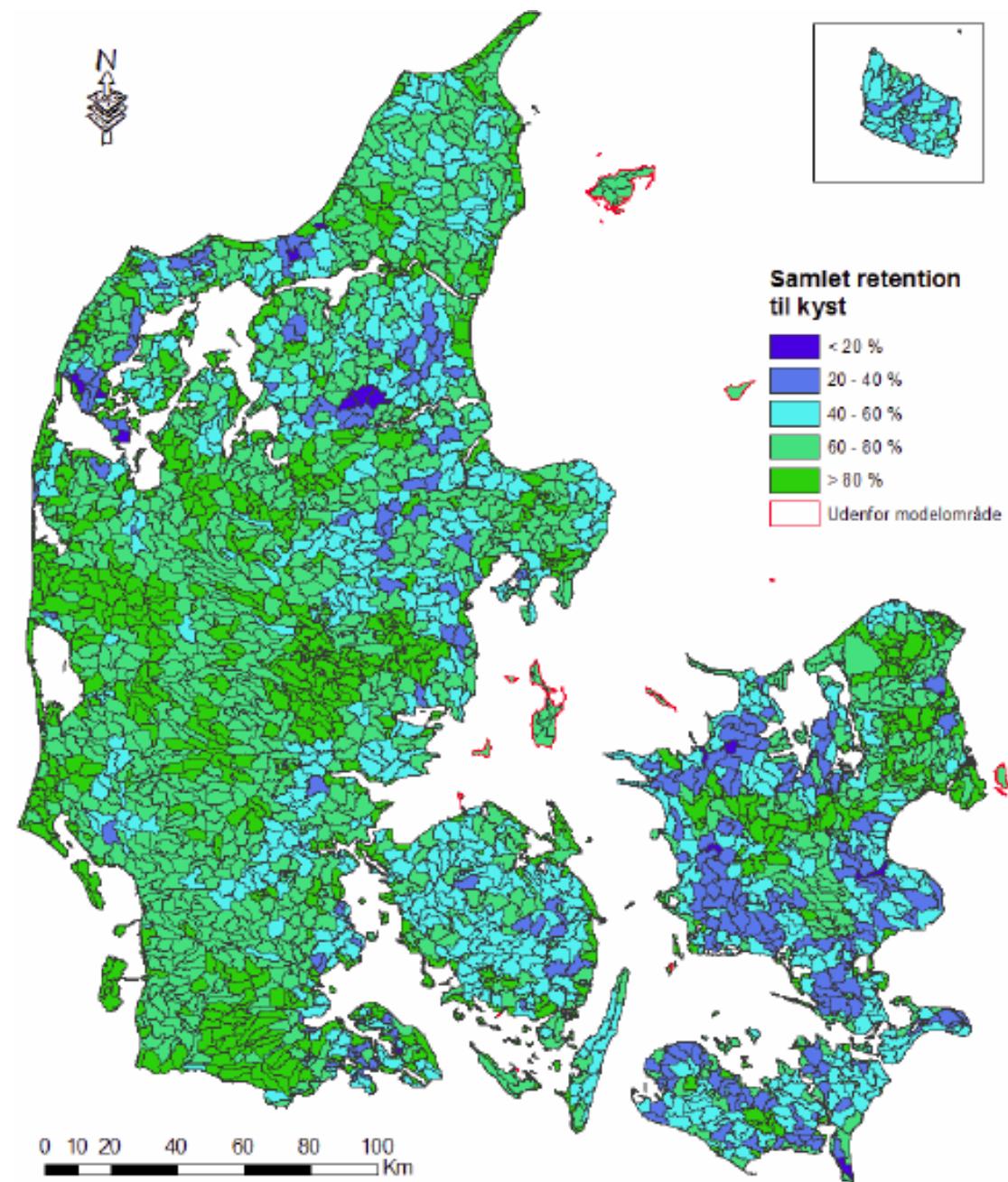




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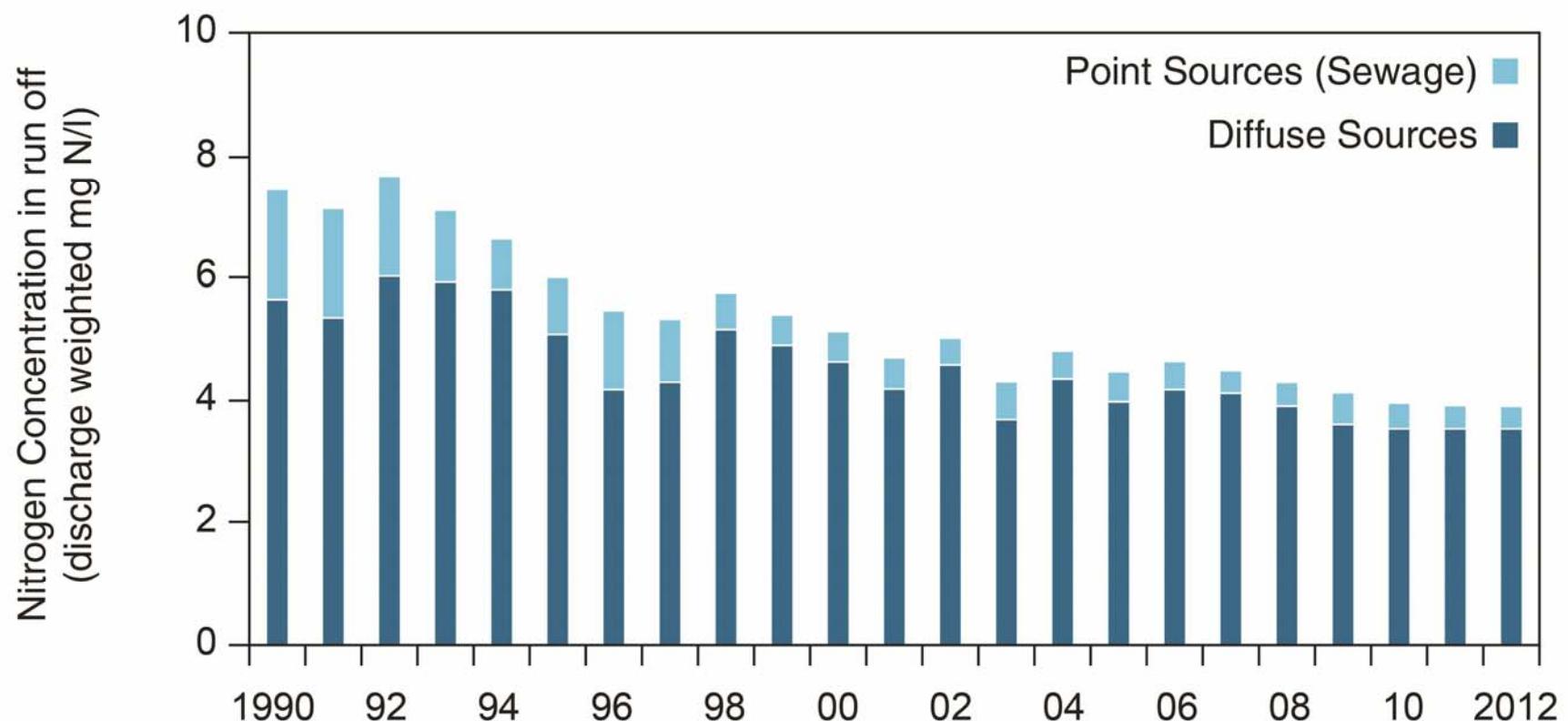






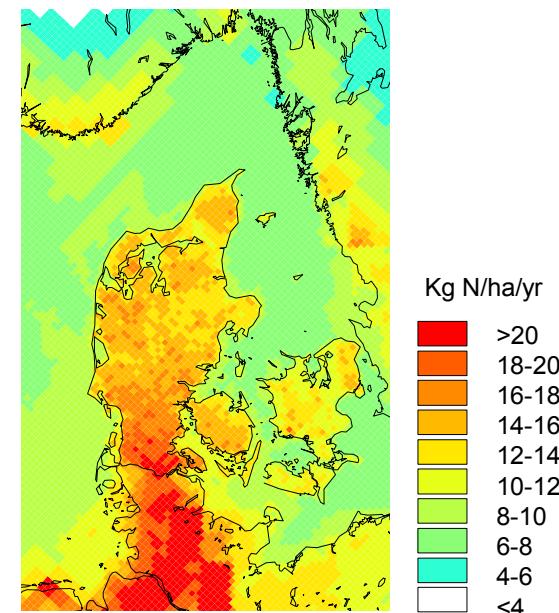
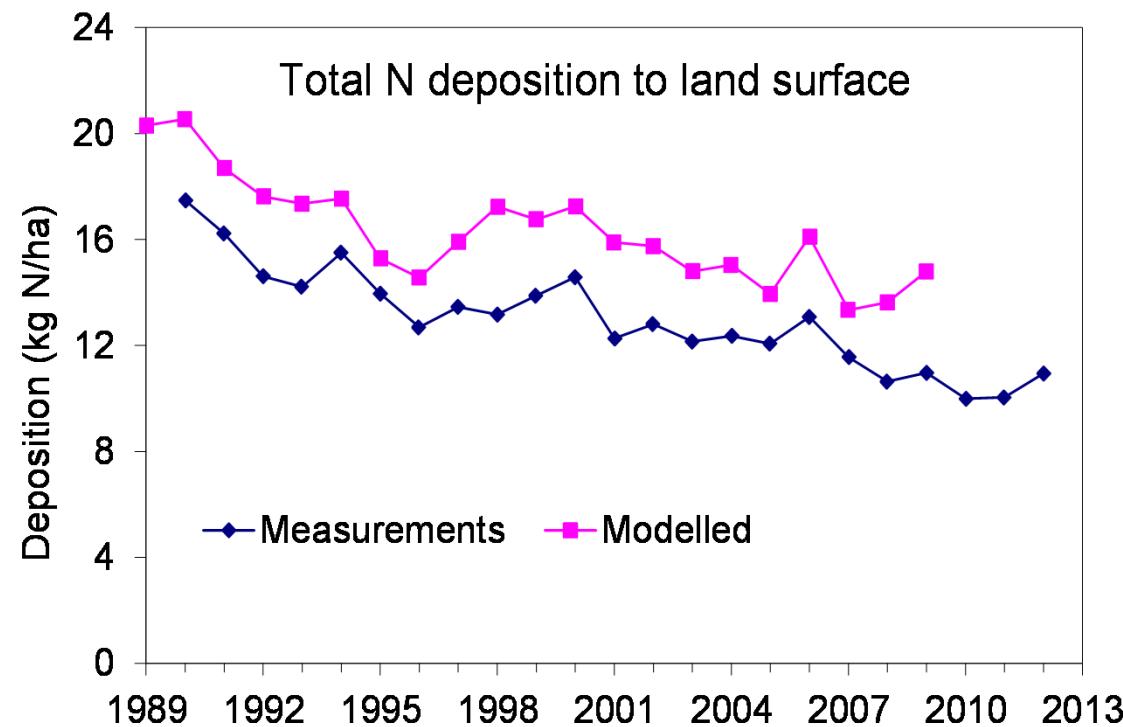
Surface water outflow to the sea

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Atmospheric N deposition

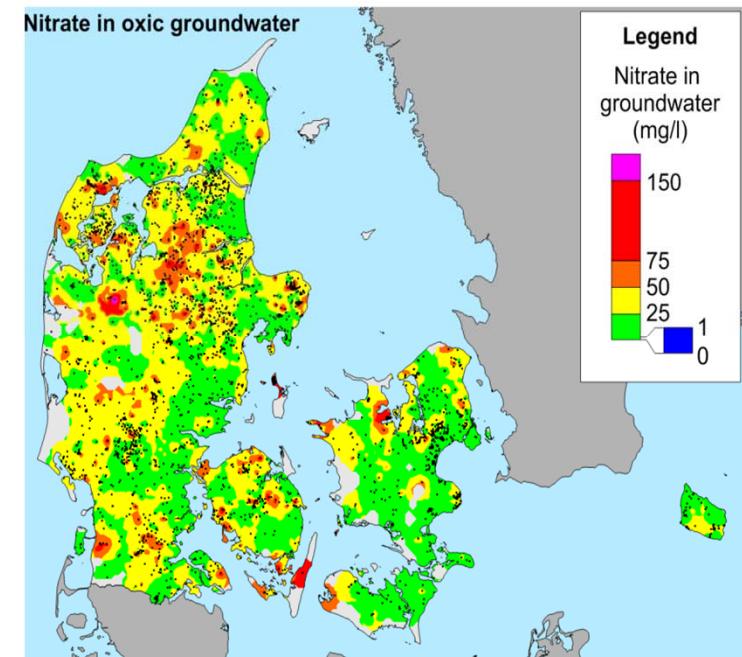
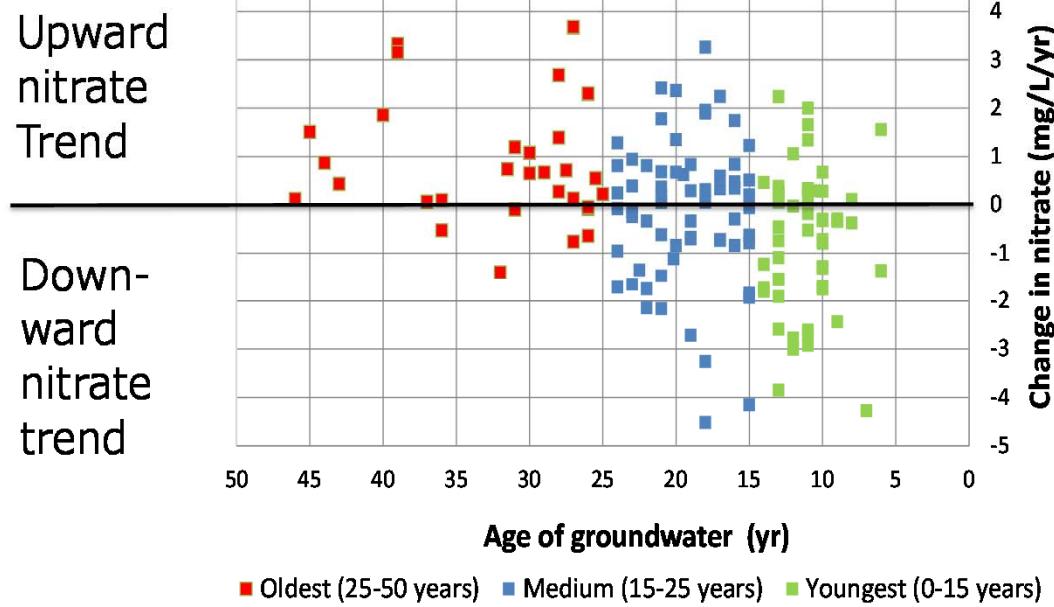
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ERL special N issue paper (in press)

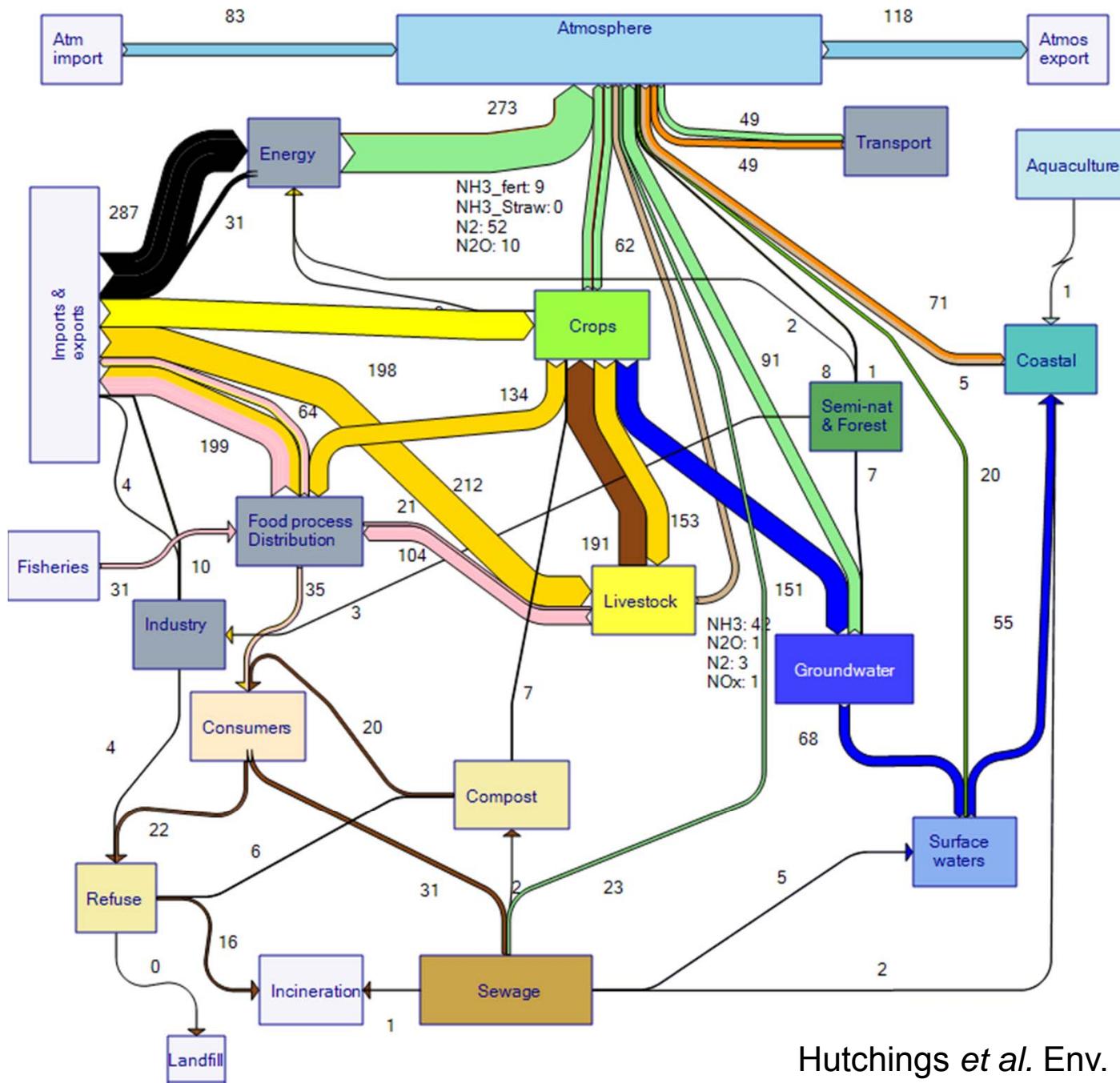
Groundwater concentration

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Types of regulation

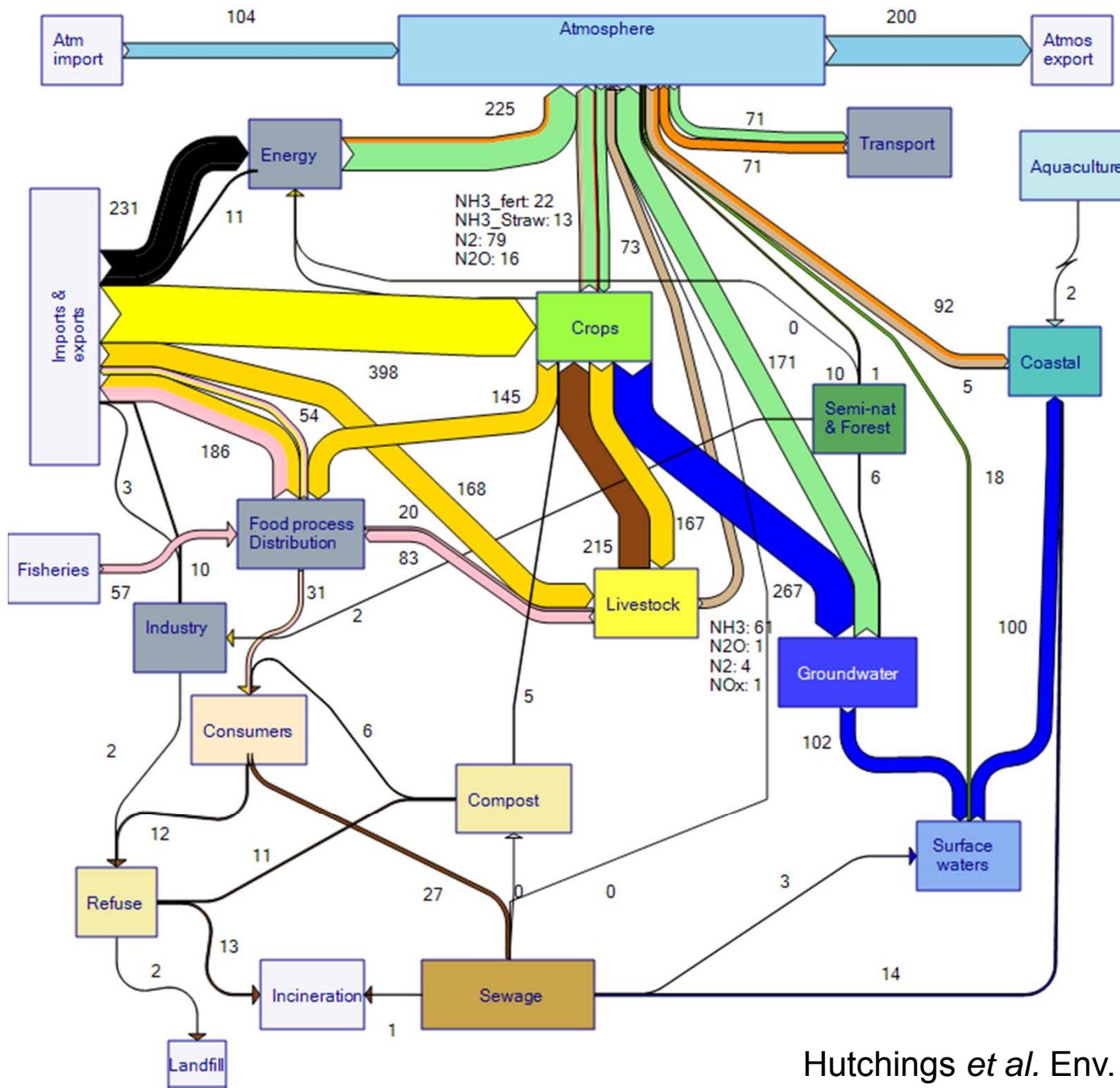
	General regulation	Geographically targeted regulation		
	Input based	Output based	Input based	Output based
Command and Control (C&C)				
Market-Based Regulation and Governmental Expenditure (MBR)				
Information and Voluntary Action (IVA)				



2010
kt N år⁻¹

Hutchings et al. Env. Research Letters (2014)

1990
kt N yr⁻¹



Foulum: March 14-15, 2016

dNmark
research alliance



Thanks to you all !



dNmark
research alliance



HØRSSENS KOMMUNE



ConTerra
Årsrapport 2014



UNIVERSITY OF COPENHAGEN



Varde Kommune



ODSHERRED
KOMMUNE



Ministry of Food, Agriculture
and Fisheries of Denmark
The Danish AgriFish Agency



MILJØMINISTERIET

Miljøstyrelsen

Danish Ministry of the Environment
Nature Agency



ALECTIA



Sundhedsstyrelsen
National Board of Health