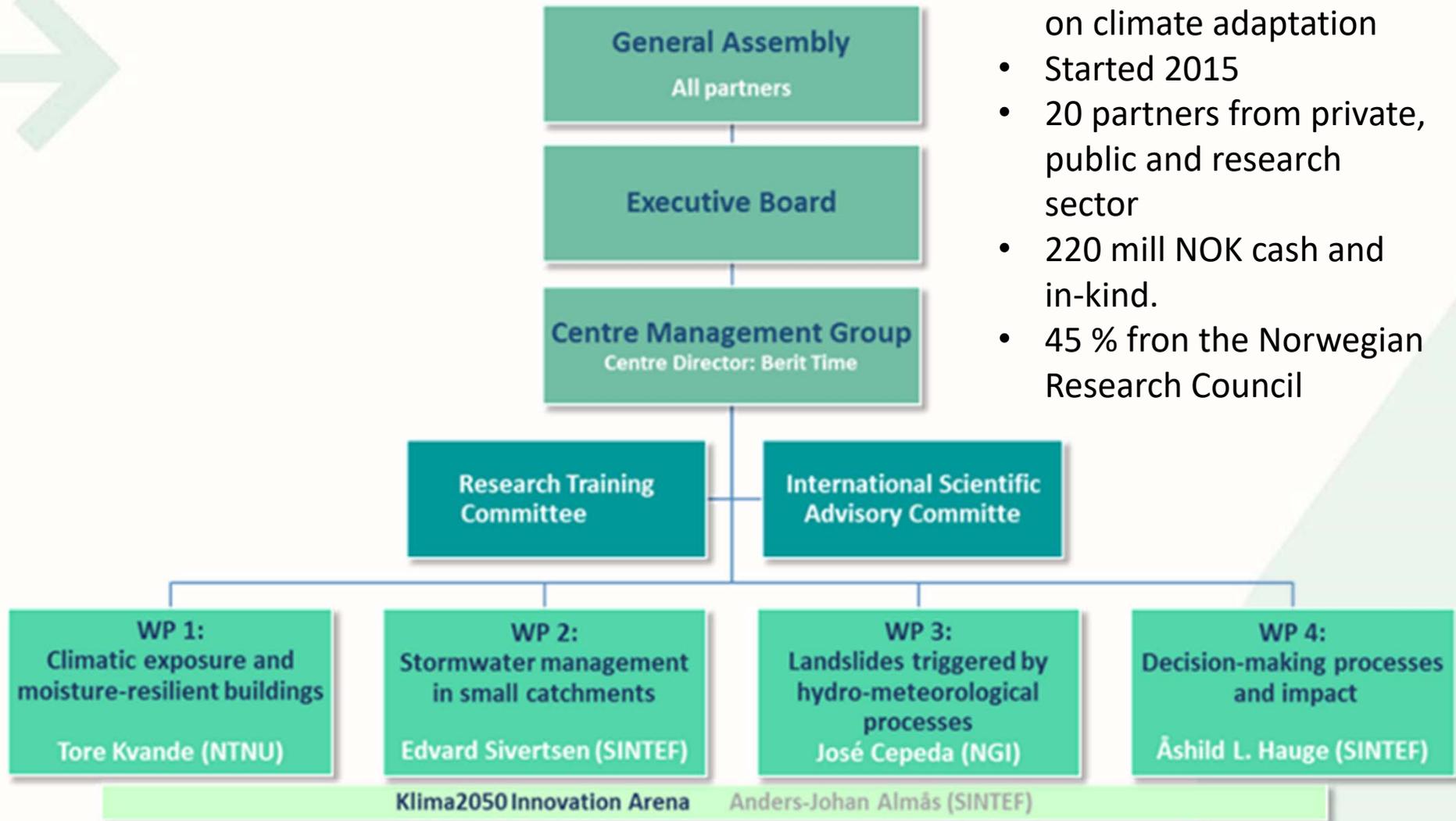




KLIMA 2050

RISK REDUCTION THROUGH CLIMATE ADAPTATION
OF BUILDINGS AND INFRASTRUCTURE



- 8-year research center on climate adaptation
- Started 2015
- 20 partners from private, public and research sector
- 220 mill NOK cash and in-kind.
- 45 % from the Norwegian Research Council



KLIMA 2050

CONSORTIUM

Private sector



Public sector



Research & education





ATTITUDES IN NORWEGIAN INSURANCE COMPANIES TOWARDS SHARING LOSS DATA

*- Public-private cooperation for
improved climate adaptation*

NOCCA Conference 23. – 25. October 2018, Norrköping, Sweden

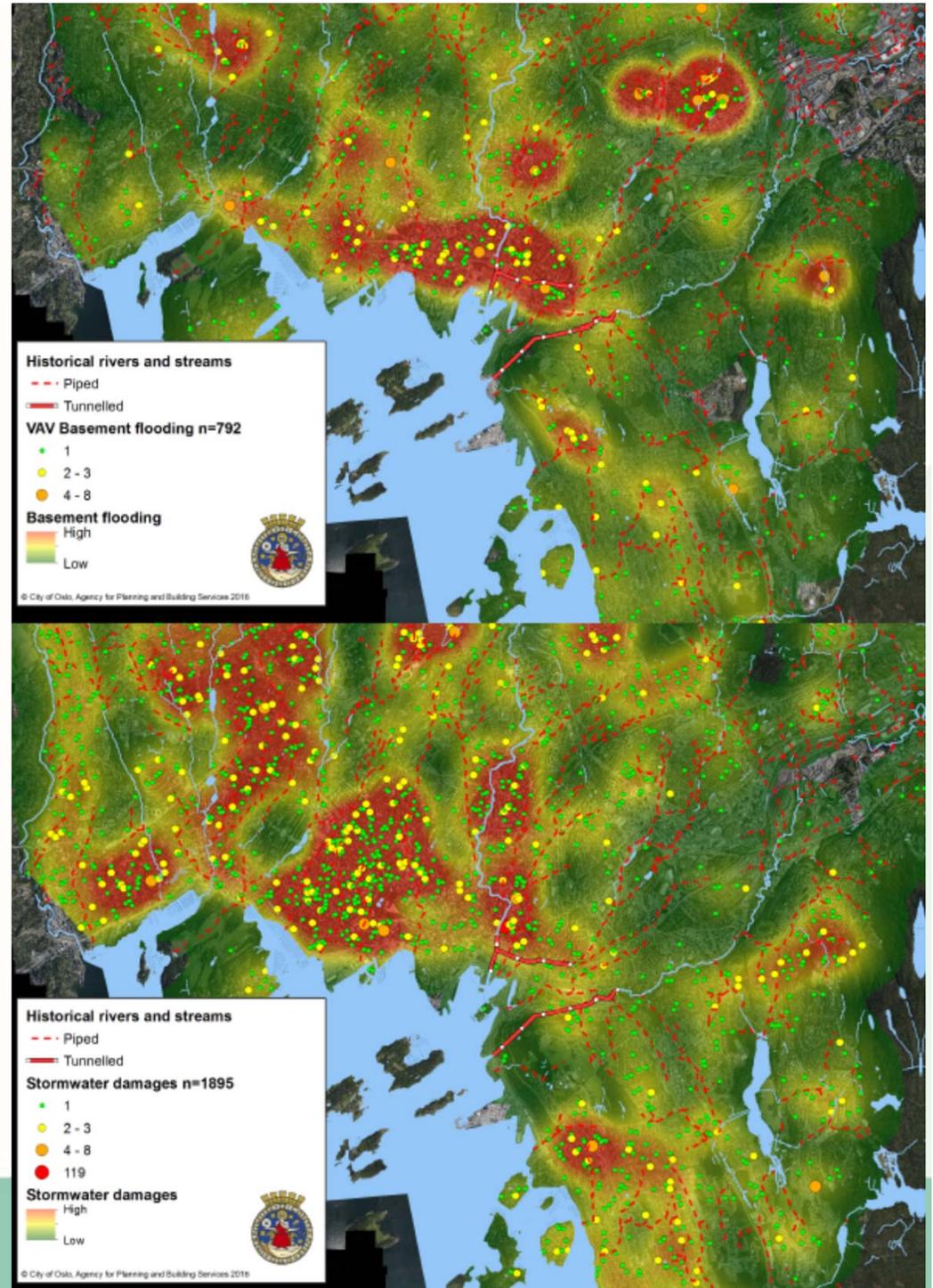
Cecilie Flyen, Senior researcher PhD student, SINTEF Building and
Infrastructure, Oslo, Norway

Anne Kokkonen, Post Doc, Norwegian Business School, BI, Oslo, Norway



Oslo

1. Damage data from the municipality
2. Loss data from insurance





Background



- Local municipalities need more precise data to improve their climate adaptative actions
- Loss data on asset level from insurance companies - high utility value for local authorities
- The Norwegian Directorate for Civil Protection (DSB) is developing a 'knowledge bank'
- Aim: To compile and provide access to data on nature events and surface water flooding to the municipalities



Research questions

1. What are the *attitudes* to sharing loss data in Norwegian insurance companies?
2. *What does it take* for insurance companies to be willing to share such data – with whom, on what level, and in what ways?
3. What *technical solutions* are required to enable sharing of loss data from insurance companies on a digital platform?



Method



- Qualitative (group) interviews in Norway's eight largest insurance companies, two of which responded via email
- Management, head of a professional division and IT-responsible; the companies selected the informants they deemed best suited to answer
- 15 informants in total



1) Attitudes

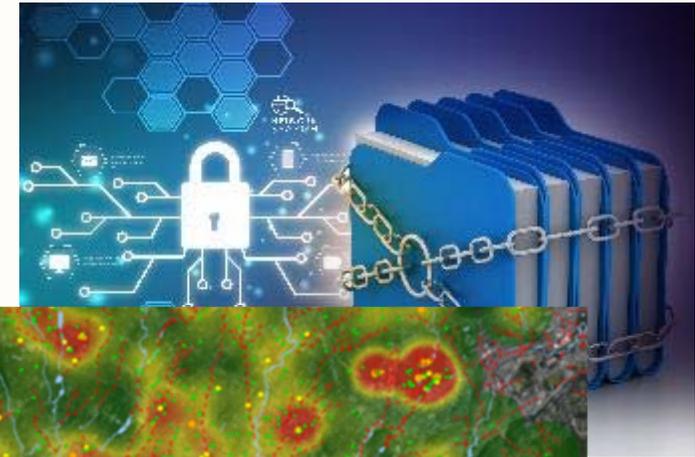


- The largest insurance companies in Norway, representing more than 90 % of the market, ***are willing to share loss data with municipalities and governmental agencies*** working with prevention of risks and climate adaptation
- They may deliver data on address level



1) Attitudes

- Willingness to share depends on how the data are treated;
 - Might bias the insurance market
- Even if they are willing, some are skeptical to the value of sharing their loss data;
 - Municipalities already possess considerable information that they do not utilize;





2) What does it take?

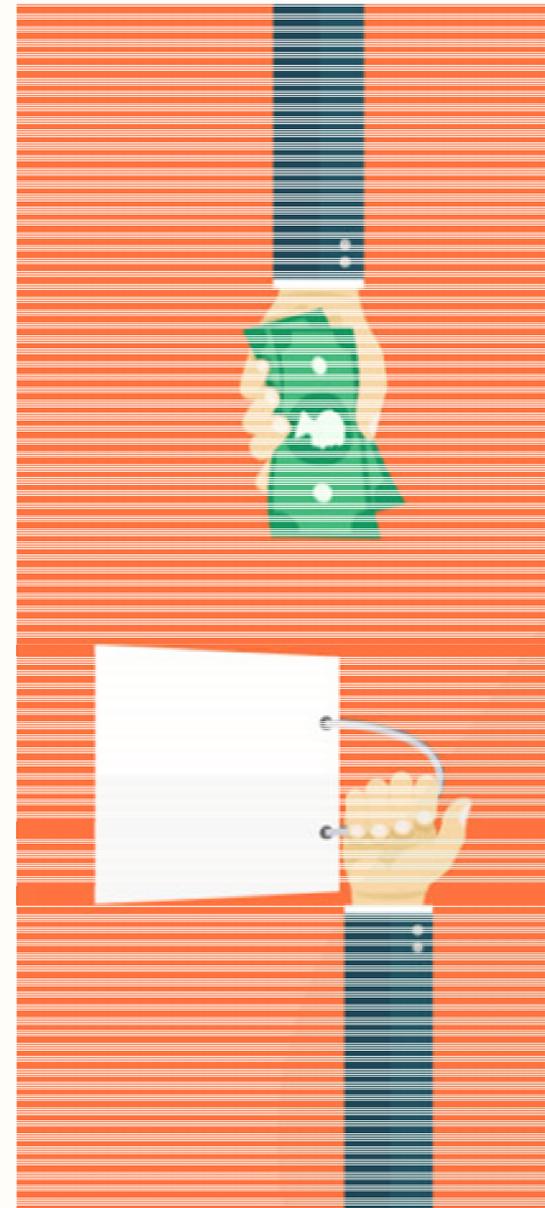
- The output (public) data must be aggregated higher than address level:
 - Protection of privacy;
- Interviewees prefer that responsibility for sharing data is *imposed* on the companies.





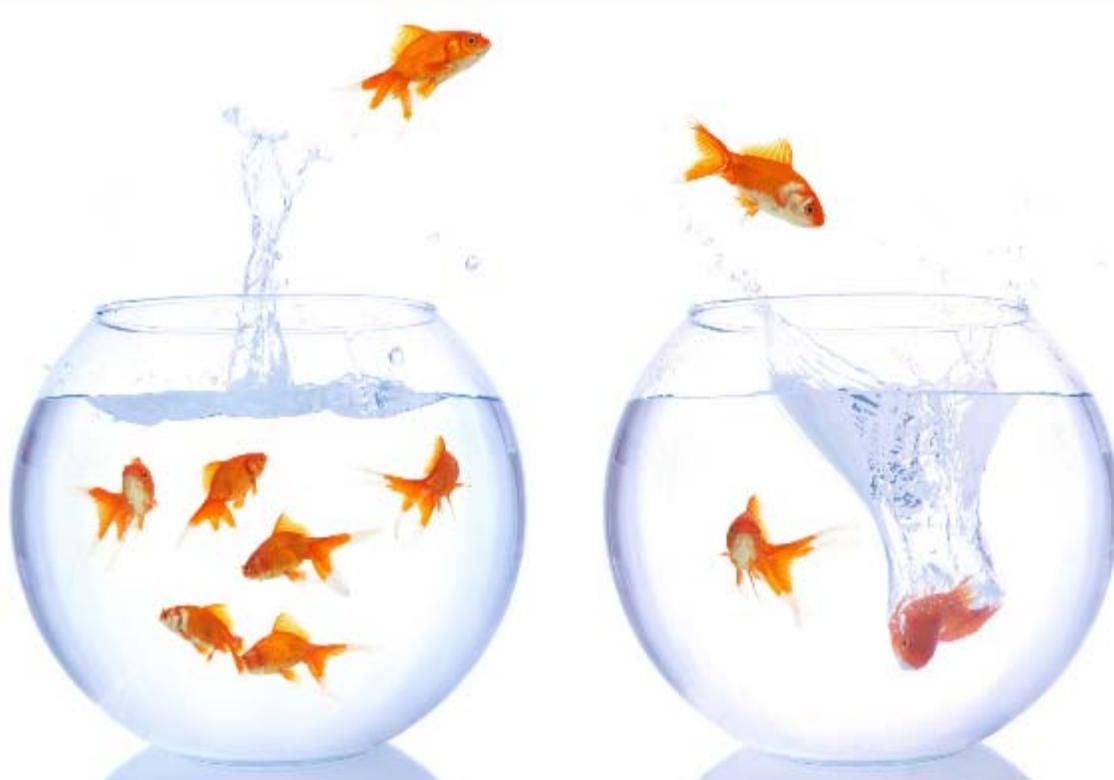
2) What does it take?

- Log-in and commercial sensitivity are important:
 - Only chosen entities should be allowed access;
 - Fear of price-fixing cartels and lack of competition;
 - Price the most central element of competition – cost-effective management and service not enough;
 - No payment wanted unless requirements for data quality proved too costly.



3) Sharing process

- The digital solution for registration of loss data is mutual and opens for problem-free sharing;
- Proposed: Transferring loss data once a year;
- Only closed cases, only known amount of money.



3) Biases in data quality

- Any missing data may easily be added; however the data may include mistakes:
 - Invoice address may substitute real damage address;
 - Date of detection may substitute date of incident.





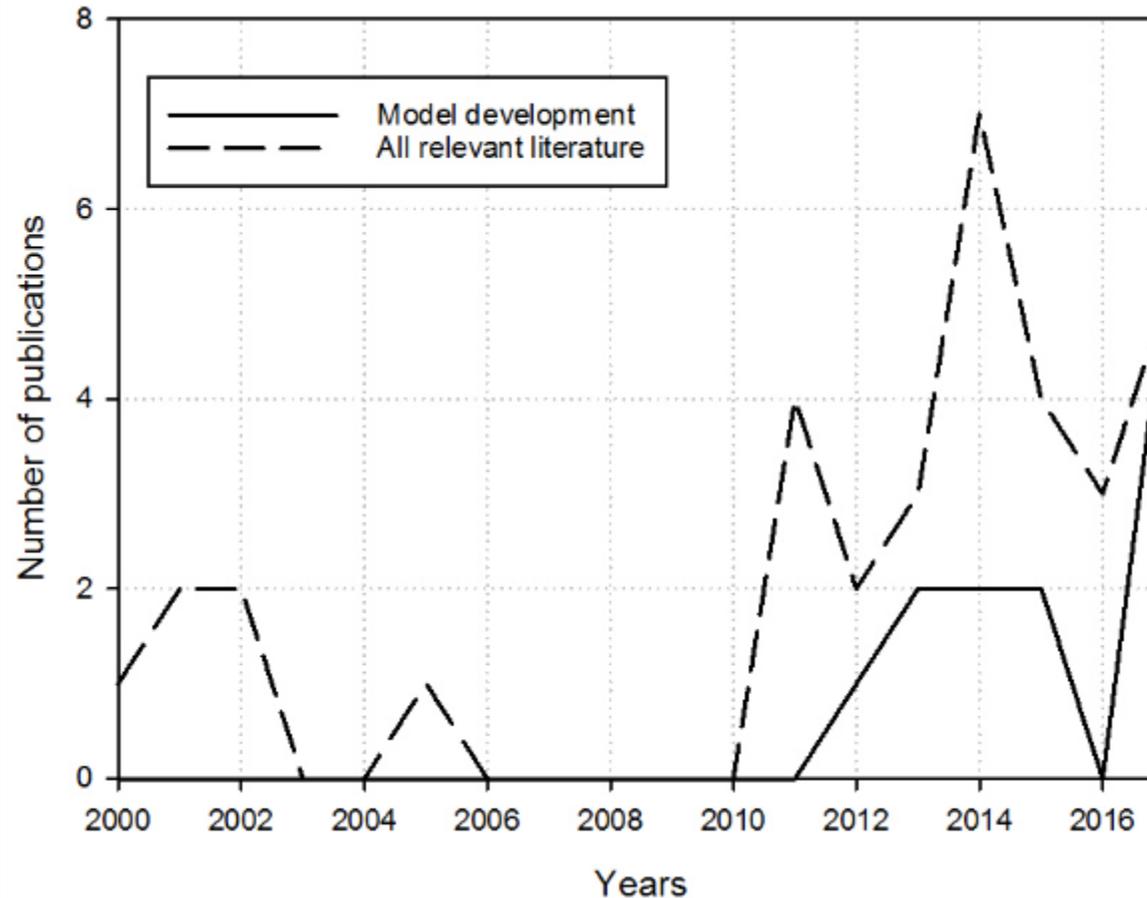
What now?



- Will the directorate for civil protection succeed with the 'Knowledge bank' for the municipalities?
- Are the legal questions on privacy solvable?
- To be continued...



Historical development of papers addressing the relationship between insurance claims and surface water flooding



Canada,
Denmark,
France,
Germany, the
Netherlands,
Norway,
Portugal,
Spain,
Sweden,
Switzerland,
the United
Kingdom and
the USA

Ref: Gradeci, K., Labonnote, N., Sivertsen, E., & Time, B. (2019). The use of insurance data in the analysis of surface water flood events - a systematic review. *Journal of Hydrology*, submitted.



www.klima2050.no

See all publications from the research project here:

Link to the report on loss data:

https://www.sintefbok.no/book/index/1191/attitudes_in_norwegian_insurance_companies_towards_sharing_loss_data



Publications

- PHD THESES
- SCIENTIFIC JOURNALS
- CONFERENCES
- KLIMA 2050 REPORTS**
- MASTER THESES
- KLIMA 2050 NOTES
- TECHNICAL JOURNALS
- PRESENTATIONS
- DEBATES
- NEWS STORIES
- OTHER PUBLICATIONS

Klima 2050 Reports

- Hauge, A, Flyen, C, Venås, C, Aall, C, Kokkonen, A, Ebeltoft, *companies towards sharing loss data*. Klima 2050 Report 11. Trondheim, 2018. ISBN 978-82-7105-1590-5
- Elvebakk, K, Time, B, Skjeldrum, P.M & Kvande, T: *Ombygging av Norge - Problemstillinger og sjekklister*. Klima 2050 Report 10. Trondheim, 2018. ISBN 978-82-7105-1583-0
- Hauge, A.L, Hanssen, G.S, Flyen, C & Strømø, E.B: *Nettverk for klimatilpassing - hvordan?* Klima 2050 Report 9. Trondheim, 2018. ISBN 978-82-7105-1576-1
- Time, B (Ed.): *Annual Report 2017*. Klima 2050 Report 8. Trondheim, 2017. ISBN 978-82-7105-1569-2



Thank you for the
attention!
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