



Task Force on Reactive Nitrogen (TFRN)

Work plan

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General objectives of TFRN:

- To provide technical information to be able
- to develop an integrated vision and approach to abatement of reactive nitrogen emissions and effects;
 - to improve coordination on the development of integrated reactive nitrogen policies;
 - to search for synergies between policies on air pollution and other policies;

Expert Panels in TFRN-1

- a) Expert Panel on Nitrogen Budgets (EPNB)
- b) Expert Panel on Mitigation of Agricultural Nitrogen (EPMAN)
- c) Expert Panel on Nitrogen and Food (EPNF)
- d) Expert Panel on Nitrogen and Climate
- e) Expert Panel on Nitrogen in EECCA countries



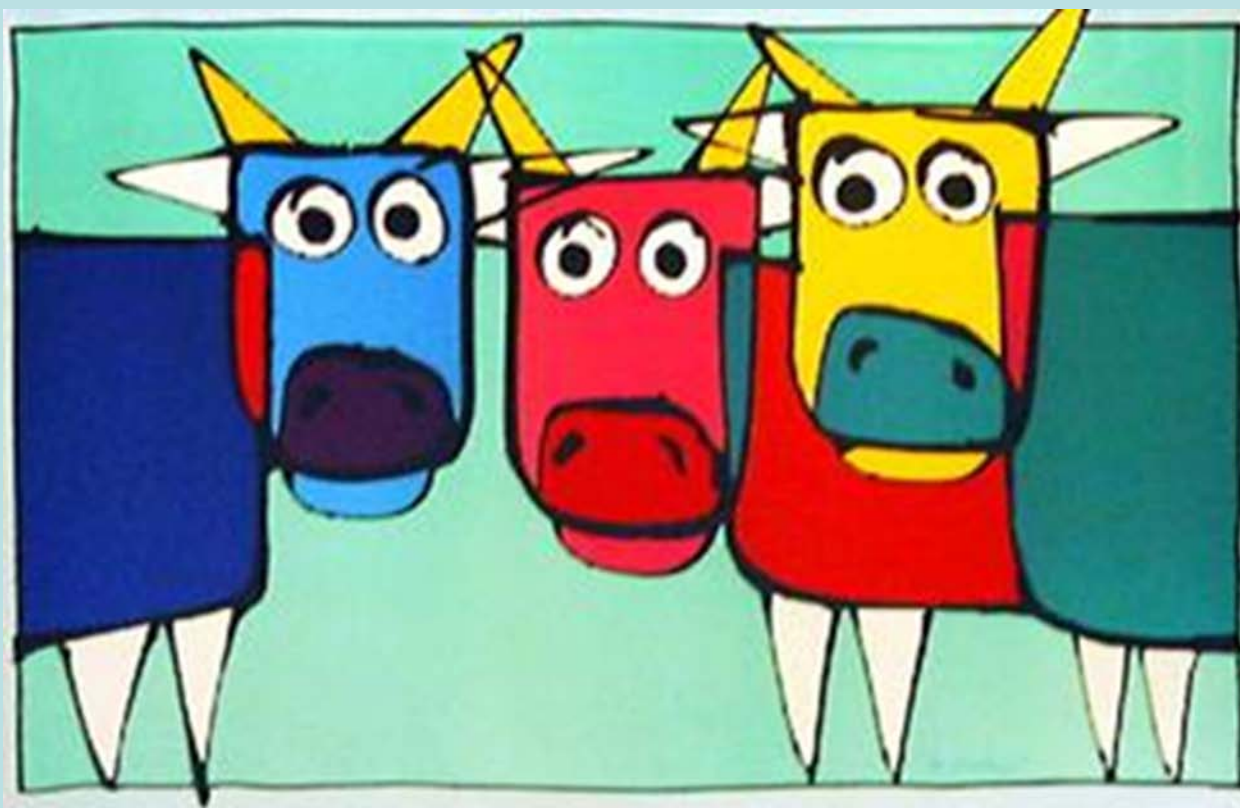
Work plan 2012 - 2013

- a) Finalizing Guidance Document for preventing and reducing ammonia emissions
- b) Updating the Framework Code on Good Agricultural Practice for Reducing Ammonia emissions
- c) Providing technical information on making and using nitrogen budgets, in co-operation with OECD, EUROSTAT, FAO and UNEP
- d) Strengthening the co-operation with countries in Eastern Europe, the Caucasus and Central Asia

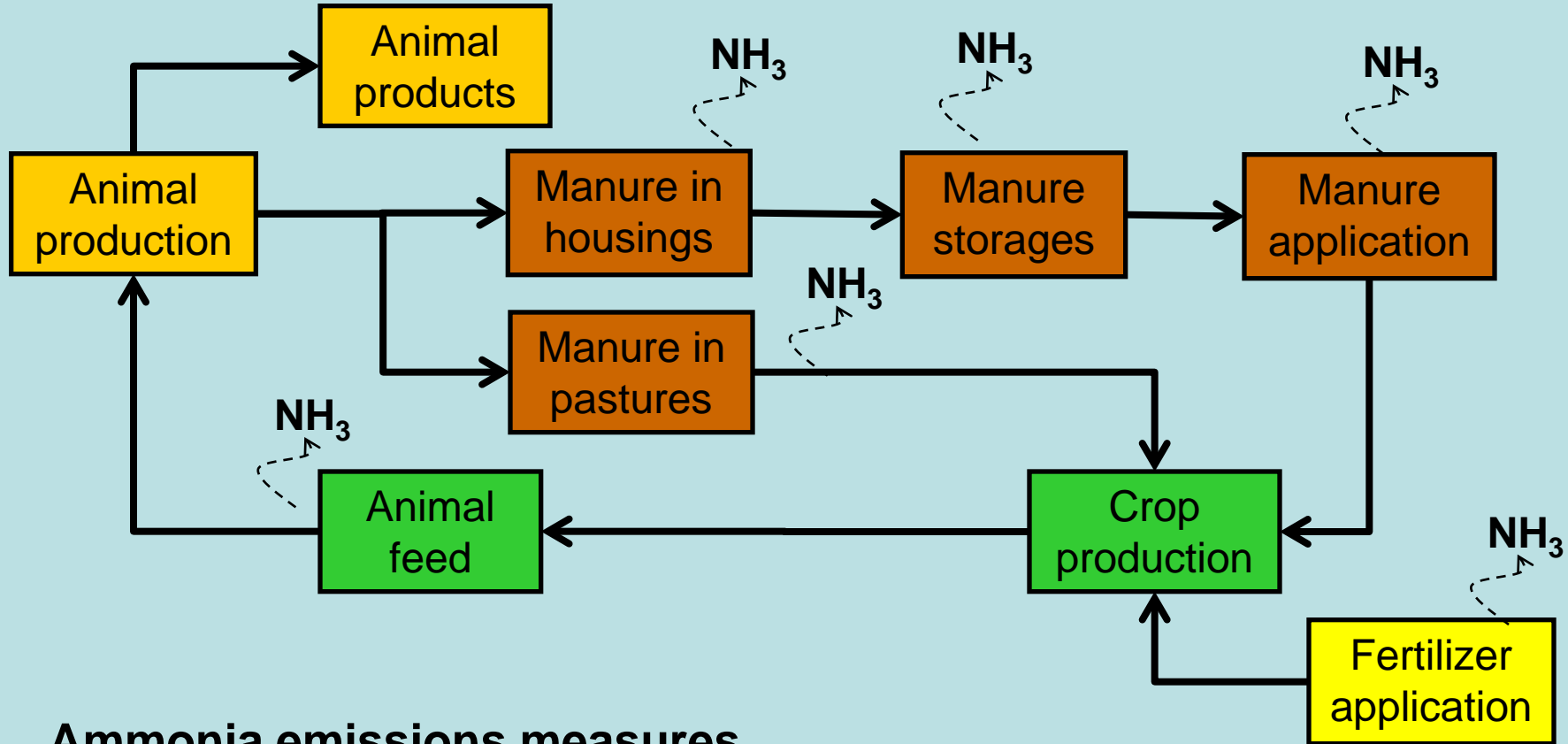
Workplan

- e) Ensuring consistency between emission estimates as developed by TFEIP and emissions abatement estimates as developed by TFRN;
- f) Explore relationships between '*green economy and nitrogen emissions*', together with TFIAM..;
- g) Explore longer-term perspectives for integrating nitrogen management within the Convention and in relation to other UNECE and international conventions

Questions?



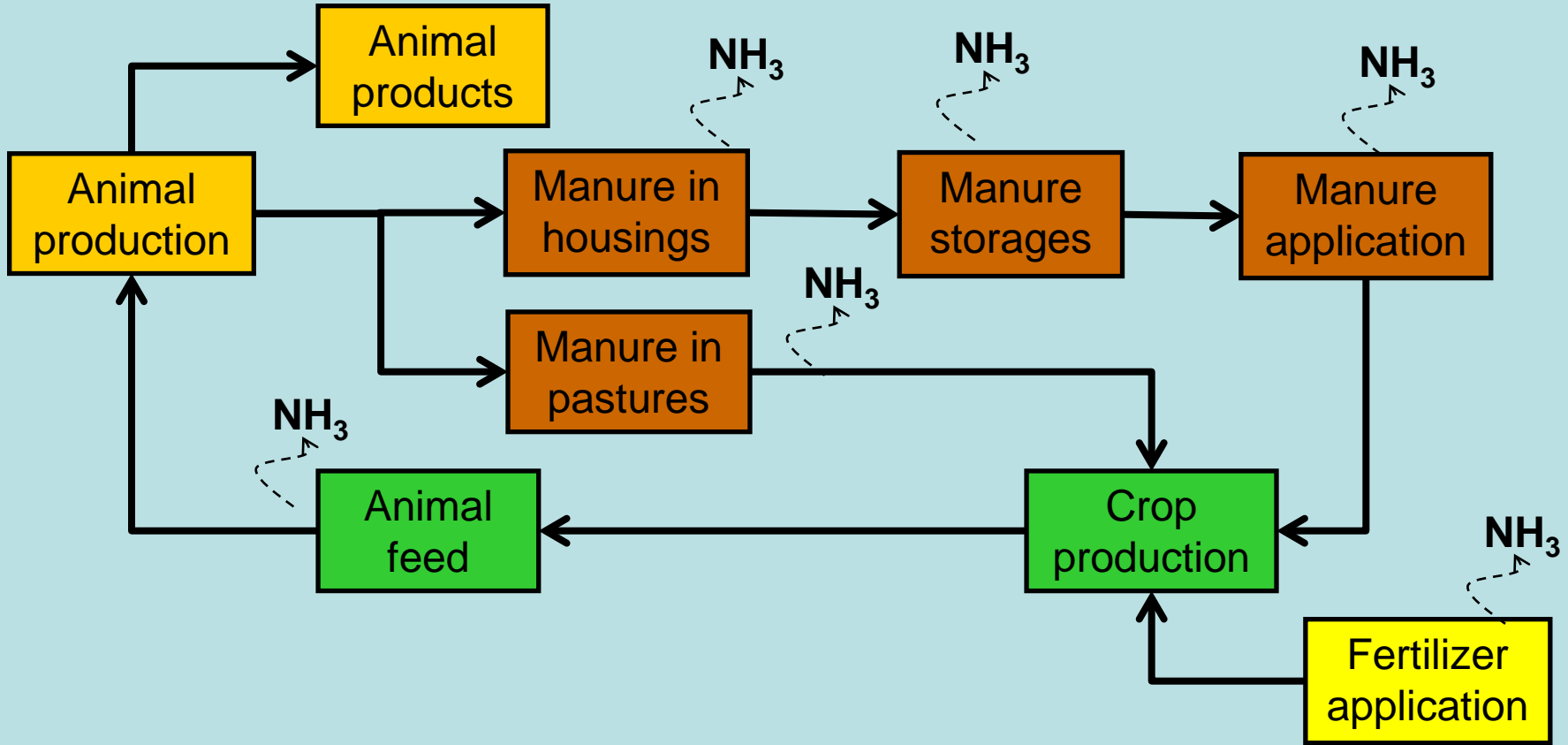
Sequence of processes that affect total NH_3 emissions

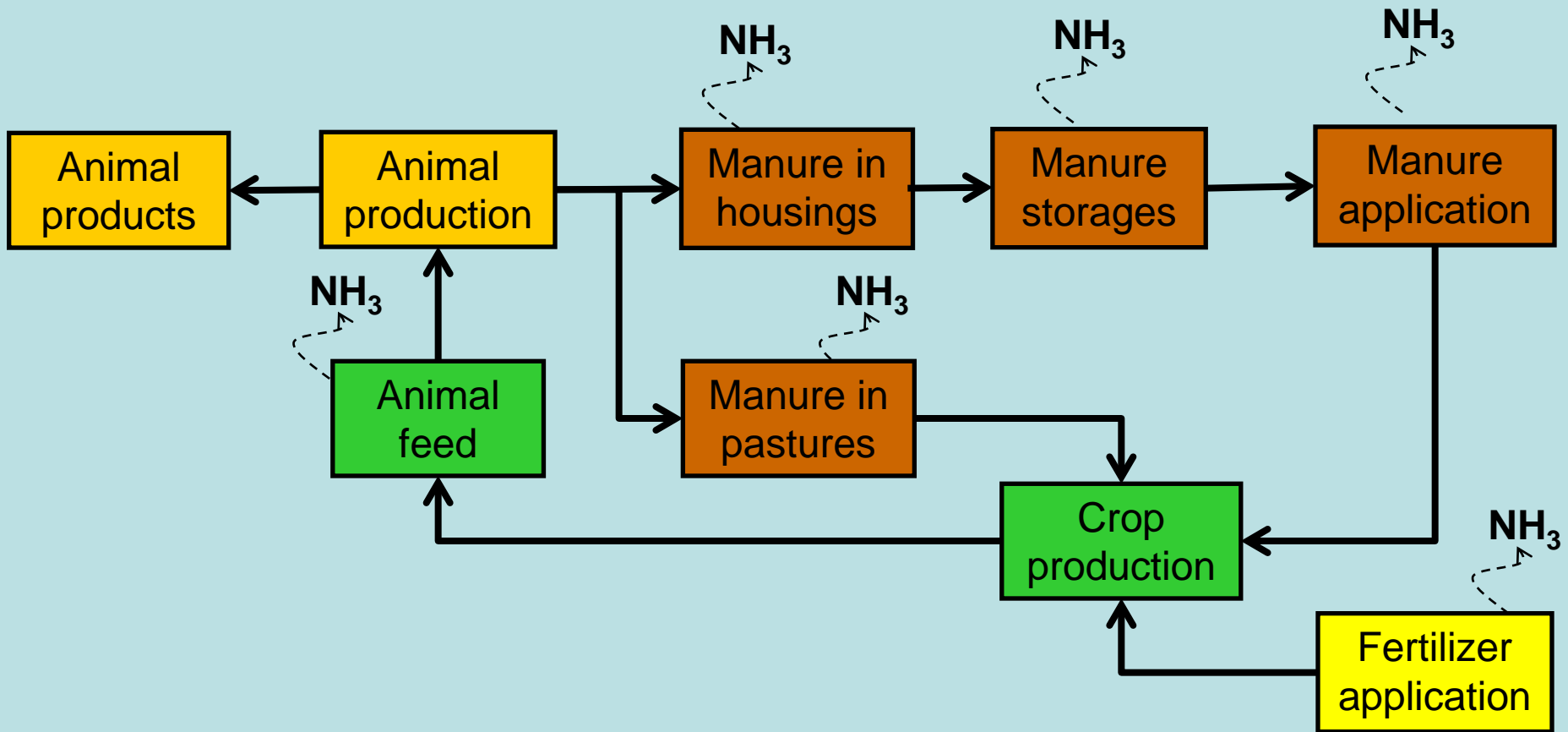


Ammonia emissions measures

1. Nitrogen management:
2. Livestock feeding strategies;
3. Animal housing systems:
4. Manure storage systems;
5. Manure application
6. Fertilizer application:

affect all sources
affect all manure sources
affect one source
affect one source
affect one or more sources
affect one source







Effectiveness of measures of Annex IX of Gothenborg Protocol

The current measures of Annex IX have the potential to reduce NH₃ emissions by ~ 50%, when fully implemented, as shown by experiences in NL and DK.

Most cost-effective measures are Nitrogen management, livestock feeding strategies and low-emissions manure application



Annex IX of Gothenborg Protocol

Advisory code of good agricultural practice:

“....a Party shall establish, publish and disseminate an advisory code of good agricultural practice to control ammonia emissions”.

1. Nitrogen management, taking account of the whole nitrogen cycle;
2. Livestock feeding strategies;
3. Low-emission manure spreading techniques;
4. Low-emission manure storage systems;
5. Low-emission animal housing systems; and
6. Possibilities for limiting ammonia emissions from the use of mineral fertilizers