Expert Panel on Nitrogen and Food

Report to TFRN7 – 1 March 2012
St. Petersburg, Russia
Alessandra De Marco
Main task

- To create a better understanding of the relationship between human diets and the N-cycle / ammonia emissions
  - Composition of present EU diets (12 commodity categories as cereals, vegetable oil, dairy and sugar);
  - ‘N-footprint’ of these categories
  - Alternative consumption and production scenarios
  - Effect of these scenarios on (EU) N – emissions, notably ammonia emissions
Main results: large differences in N footprint between products
...and between countries
### Six scenarios

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<th>Scenario</th>
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<td>Reference – BF$^1$</td>
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<td>-25% beef and dairy</td>
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And two scenarios for land use: ‘High price’ (more cereal production) and greening (extensification and bioenergy)
Shift of protein intake towards plant-based products

Per capita protein intake EU-27

With co-benefits for health (lower intake of saturated fats)
Effect on Nr emissions

[Graph showing effect on Nr emissions with different scenarios, including BAU / BAU_balf, -25% beef and dairy, -25% pig meat, -25% `all animal, -50% beef and dairy, -50% pig meat, -50% all animal. Categories include NH3 - high price and Nitrogen leaching and run-off - High price.]
Effect on N deposition
Timeframe

- Draft summary now available
- Please respond before 12 March 2012 to: Henk.Westhoek@pbl.nl
- New summary will be available April 2012 → new comments welcome
- Publication of report foreseen in May/June 2012
- Report will be published as ENA – special report