

# Manure storage

Chair: Shabtai Bittman

Rapporteur: Wilfried Winiwarter

# Annex IX Guidance document

- Cost data for major processes compiled
- Agreement of cost data at TFRN-5
- Further Procedure:
  - Convert to GAINS
  - Assess costs for ambition levels for European countries
  - Update of guidance document

# Abatement options: slurry stores

	Option A	Option B	Option C
Existing	<p>≥40% - natural crust, floating cover, e.g. peat, Leca, chopped straw</p> <p>Cost: 0 to 1.10 Euro/m<sup>3</sup> storage capacity /yr</p>	<p>≥40% - natural crust, floating cover, e.g. peat, Leca, chopped straw</p> <p>Cost: 0 to 1.10 Euro/m<sup>3</sup> storage capacity /yr</p>	<p>≥40% - natural crust, floating cover, e.g. peat, Leca, chopped straw; delay in requirement until Dec 2017 or 2019)</p> <p>Cost: 0 to 1.10 Euro/m<sup>3</sup> storage capacity /yr</p>
New	<p>≥80% – e.g. storage bags; rigid lids; tents</p> <p>Cost: 2 to 5 euro/m<sup>3</sup> storage capacity/yr</p>	<p>≥60% - e.g. plastic covers</p> <p>Cost: 1.25 to 1.9 euro/m<sup>3</sup> storage capacity/yr</p>	<p>≥40% - natural crust; floating cover, e.g. peat, Leca, chopped straw</p> <p>Cost: 0 to 1.10 Euro/m<sup>3</sup> storage capacity /yr</p>

# Abatement options: solid manure

Solid manure: sheet covers: 0.5 to 1.0 euro/tonne /yr (UK)

(“... so far as [a country] considers them technically and economically feasible”)

# Book project

- Authors: Shabtai Bittman, Barbara Amon, Carlos Pineiro, Andy Vander Zaag, Laura Valli, Wilfried Winiwarter
- Contributing authors: Harald Menzi, Helmut Döhler, Tom Misselbrook, Ken Smith, Lena Rodhe, Colin Burton
- BA and LV: emission abatement
- CP and WW: cost data & fit to GAINS scheme
- AV: GHG interactions