Welcome
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Pig Farmer
But also ......

...... Chairman NVV = Dutch Pigfarmers Association
Constraints to the adoptions of nutrient and energy recovery practices in Holland
Situation/development in Holland

Production livestock manure

- Liquid manure:
  - Cattle indoor
  - Cattle outdoor
  - Pigs
  - Poultry
  - Rest

- Solid dung

www.compendiumvoordeleefomgeving.nl
Situation/development in Holland
Situation/development in Holland: most intens regions

Bron: CBS
Development of manure costs average pigfarm

Manure costs in €
What did the government do?

- Stricter regulation on production
- Stricter regulation on use
- Stricter regulation on trade and transport
- High level of administration control
- High penalties
What did producers do?

- Efficient production (excretion/animal)
- Compete with each other
- Pay the bill......
- Passive on technical innovation
Why passive on innovation?

- Consistent legislation
- Economical perspective (cost/benefit)
- Technical possibilities
- Available alternatives
- Short term cheap solution.......
New perspective on horizon

- Energy
- Nutrition
Energy

- Biogas with co-products
- Biogas, mono installations

On this moment only possible with subsidy; not economical sustainable.
Nutrition

- Manure treatment
- Replacement of artificial fertilizer
- New source P205
Development price P205

Price per kilo P205 in euros, delivered at farm in bulk, excl. VAT

Source: LEI
Government

Support/reward positive initiatives by

- different regimes
- back-up legislation
- dynamic rules
- consistent politics
Producers

Proven techniques
Rewarding policy

- Economical sustainable
- Environmental sustainable
- Positive image
So what are the biggest constraints?

- Consistent legislation
- Economic perspective
- Proven techniques
- Cheap short term alternatives
Thank you for your attention!