# **Environmental Technology Verification (ETV)**





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### What is Environmental Technology Verification?



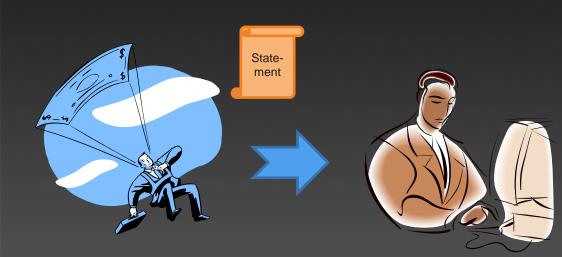
"It does what it says on the declatation"



- Fit for purpose
- Independent
- Recognised approach
- Credible
- To the point communicated

# **ETV** objectives











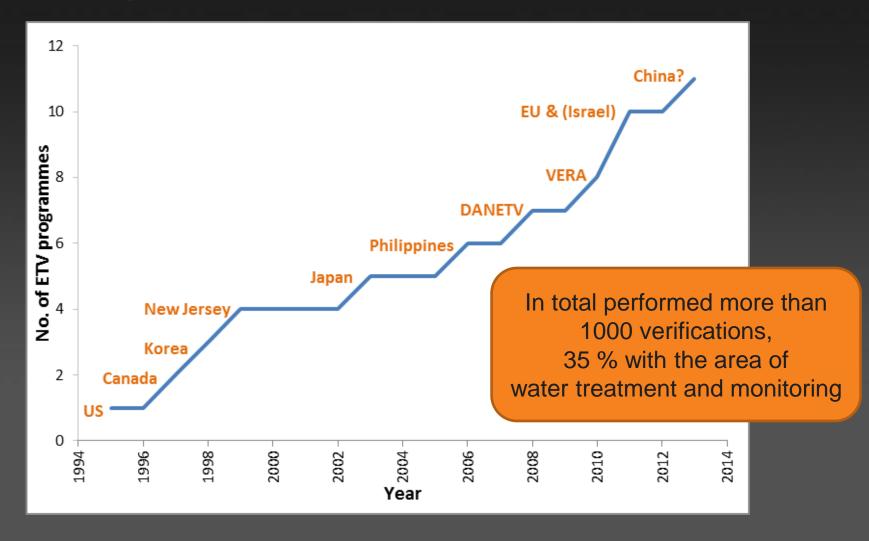
Vendor

Purchaser

Regulator

# The history of ETV





# **DANETV**



- Front-runner for the EU ETV pilot programme
- A Danish ETV programme, funded by the Danish Agency for Science, Technology and Innovation (until 2012)
- In operation since 2008
- Cooperation between 5 Danish institutes
  - FORCE technology

- DHI
- Danish Technology Institute
- DELTA

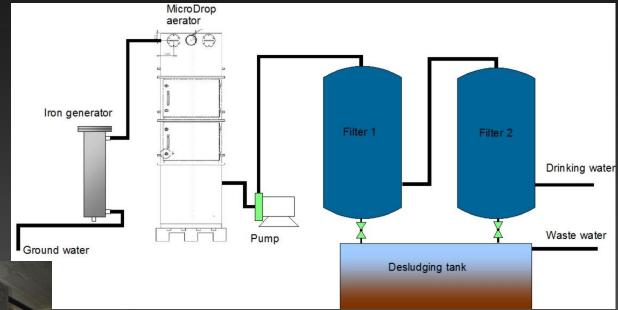
- AgroTech
- Verifications have been performed under the following areas:
  - Water monitoring and treatment (7+1)
  - Air emissions reduction (2+2)
  - Energy efficiency (5+3)
  - Agricultural technologies (4+1)

Homepage: www.evt-denmark.com

# Example of ongoing verification



Arsenic removal from drinking water





## **EU ETV pilot programme**



- Expected launch: November-December 2011
- Steering group: EU, Denmark, Finland, Czech Republic, UK, Poland, Belgium, France
- Technology groups included:
  - Water treatment and monitoring
  - Materials, waste and resources
  - Energy technologies
- First EU verification bodies in full operation expected early summer 2012.
- DANETV is already operating in accordance with EU ETV procedure,
   DANETV will apply to become EU ETV verification body

### Market potential and demand for EU ETV



	Site characte- risation tools	In-line water monitoring	Anaerobic digestion
Size of EU market	1 bn €	35-50 m €	1-2 bn €
Companies in EU	100	50-75	50-75
Demand for ETV	Very high	Very high	Very high
Developers likely to use ETV in next 1-2 years	20+	15-30	20-25
Potential for self-financing of ETV	Yes	Yes	No

Course: Detailed assessment of the market potential, and demand, for an EU ETV scheme. EPEC, June 2011.

#### **Funding**

Denmark: Fornyelsesfonden, EUDP, GUDP, Tilskudsordning til

miljøeffektiv teknologi, Vandsektorens Teknologiudviklingsfond,

Videnskuponer

EU: LIFE+, CIP

### Joint and co-verifications



- Verification is by default verification per programme, but a cooperation mechanism has been developed
- 3 verifications performed as joint or co-verifications with US and Canada







Pictures from joint verification performed in Denmark

# Towards mutual recognition

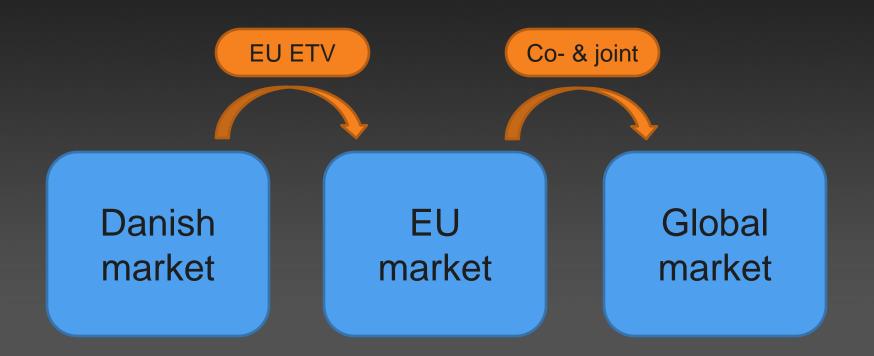


# Vision: Verified once, accepted everywhere

- One common EU approach
- Mechanism for global cooperation
- Eventually a final ISO standard, draft exists
  - Cooperation and the International Working Group (IWG)
     Environmental Technology Verification
    - Full members: EU, Canada, the Philippines and soon Korea
    - Observers: US, Japan, China, Cambodia, Malaysia
- Consultation on cooperation with Asia
- Creating ETV market place

# Summary







Thank you for your attention

For more information visit

www.evt-denmark.com

or contact Mette Tjener Andersson

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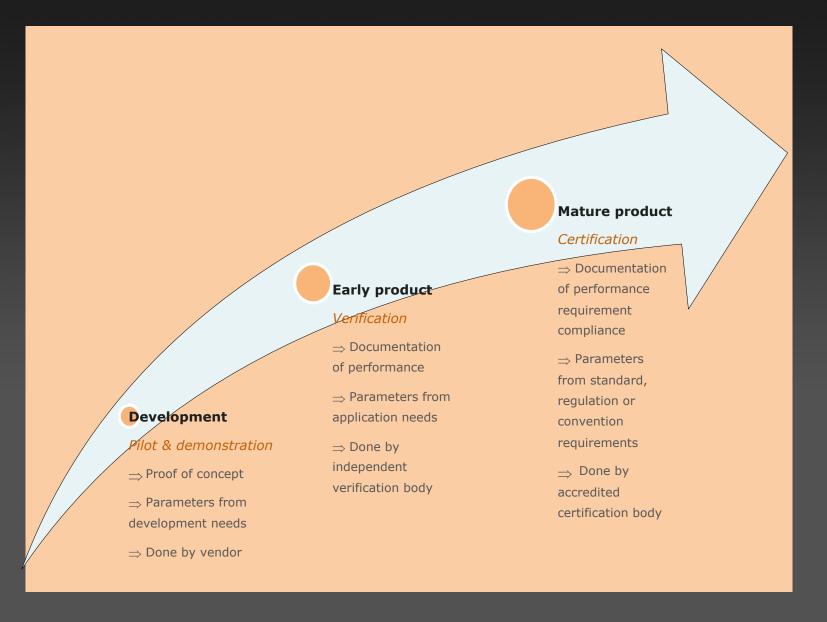
### ETV process



- The ETV process consist of the following steps:
  - Contact and contract
  - Planning (verification protocol and test plan)
  - Testing if required
  - Assessment and verification (test and verification reports)
  - Publication (Statement of Verification)

# What is an ETV?





# Objective of EU ETV pilot programme



- To help developers and vendors, especially SMEs, <u>provide objective and</u> <u>reliable evidence on the performance of new eco-technologies</u> they are bringing to the market, in order to convince investors and potential customers about the merits of the technologies;
- To support technology purchasers (public or private), who need to <u>base</u>
   <u>their buying decisions on sound information</u>, widely recognised as
   scientifically valid and acceptable as proof of evidence in tendering and
   purchasing procedures;
- To <u>facilitate the implementation of public policies and regulations</u> by providing citizens, regulators and decision-makers with solid information on the level of performance achievable by new eco-technologies ready for the market.