

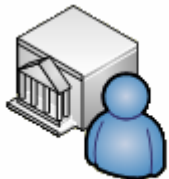
Finnish approach of EU-ETS workflow automation

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&

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- Main user of the system and database
- Automated workflow for permitting
- Browsing and printing of monitoring plans, AERs, GHG permits and verification reports
- Following verification in real-time



Competent Authority



National ETS registry

- Automated proposal of verified annual emissions
- Automated nomination of verifier



Installation

- Automated workflow for applying a permit or a permit update & monitoring plan
- Automated workflow for emissions reporting
- Automated workflow for verification
- All information in electronic format



Finnish IT-system
www.paastolupa.fi



Public

- Browsing and printing of
 - GHG permits & monitoring plans
 - Emissions reports
 - Verifier's permits
 - AERs and verification statements

XML/ CVS/ TXT



Data exporting

- GHG Inventory
- Article 21 reporting
 - Tables
- Supervision and enforcement

Adobe



Verifier

- Automated workflow for verification
- Automated workflow for applying a verifier's permit

- Automated workflow for permitting
- Browsing and printing of monitoring plans, AERs, GHG permits and verification reports
- Following verification in real-time

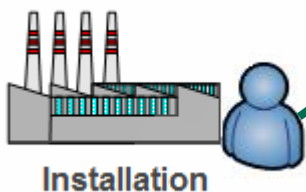


Public

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Hungarian IT-system
www.hunetdata.hu



Installation

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Verifier

- Automated workflow for verification

Example of the automated workflow

Verification

Employed verifier body is automatically nominated in the register

Verified emission figure is transferred automatically to the register



National ETS registry



20,000 ton CO₂

Finnish IT-system
www.paastolupa.fi



Public

Installation logs into IT-system using internet and starts using the system

Installation opens pre-filled emission report form and fills the required data

Emission figures are published automatically on 1st of April

Emission reports and verification statements are published automatically

Verifier logs into IT-system using Internet and starts using the system

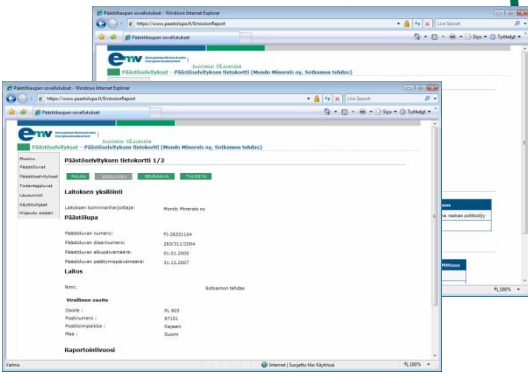
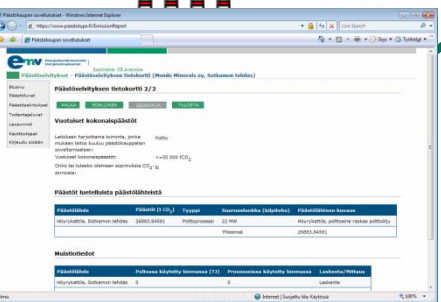
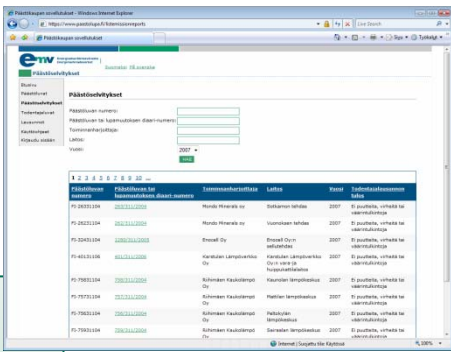
Verifier opens and checks the emission report of the installation

Verifier opens pre-filled verification statement and fills the required data

Verifier signs electronically the verification statement

Automatic e-mail is sent to the installation

Installation checks the verification statement



To consider when developing IT

- Implementing only the critical functions in the first phase
 - Consideration of properties needed
 - Specify first, implement then
 - Start by implementing only the properties with highest priority
 - Developing a tailored solution is often more costly, takes more time and doesn't in all cases lead to a better result than purchasing a ready-made software product
- Integrations should be considered carefully
 - Often costly to implement, but can lead to considerable cost savings in the long run
 - Help to increase data quality and to offer better service to the end users
- Helpdesk service is appreciated
 - Some operators are using the system only once per year
 - Some operators need guidance

Future developments

- Automated issuance of monitoring plan (*in use*)
 - While applying the permit, operator will fill in the monitoring plan based on the questions in the system (dynamic forms)
 - Different sectors are having a different set of questions based on the MRG2007
- Paperless workflow (*ready in the end of 2008*)
 - Printing of permits, MPs, AERs etc. is not needed
 - CA can issue and sign a permit decision electronically
 - Operator can receive the permit electronically
- Electronic archive (*in 2009*)
 - Documents are stored only in electronic form
 - Fulfilling the requirements set by the Finnish National Archive Service

Further information

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