CBRAIN

Digital Water Governance

6 CLEAN WATER AND SANITATION

- **Fast-tracking environmental permitting**
- **Efficient wastewater inspections**
- **Full-circle grant management for protection of water resources**

Fast-tracking environmental **permitting**

Environmental permitting is on top of the global agenda. From desalination projects to protecting groundwater resources, sound environmental management is essential to deliver on SDG 6. But too often bureaucratic shortcomings and outdated ICT become impediments to environmental progress. This brings renewed focus on the ability of the executive branches of government to deliver fast-track permitting.

Expedited permitting in 8 weeks in Denmark

In Denmark the Environmental Protection Agency (DEPA) decided to rapidly digitalize the processes pertaining to environmental impact assessments and permits. In less than 8 weeks, a fully digital application and case management solution was deployed based on the EPA's own screening process.

The solution registers and relates the application to other relevant authorities and ensures that all relevant national, European and global regulations are met and documented. A major part of this is keeping track of the public consultation phases that allow the public to raise concerns regarding environmental impact of project. These are crucial for the permits to be legal and valid and are often cause of litigation around the world.

Multi-agency collaboration hub in place

Digitalization projects are often held back when cross-agency collaboration is needed. DEPA wanted to include a collaborative portal in their permitting solution, where relevant stakeholders could follow the approval process of their application and communicate. This kind of transparency both increases efficiency gains and avoids bottlenecks in particular phases of the approval process.

The collaborative hub was set up alongside the solution within the same timeframe. The experience from Denmark shows that these important considerations behind environmental regulation can be handled efficiently in a digital process deployed with short lead time. At the same time, it increases transparency allowing for efficiency gains amongst other agencies and stakeholders.

Full circle grant management for **drinking water**

Denmark takes pride in providing some of the world's cleanest drinking water from natural drinking water reserves. Recent years has shown increased residues of unwanted chemicals in the drinking water. This has led to immediate political action with a new national drinking water fund managed by the Danish Environmental Protection Agency (DEPA).

Using cBrain's base model for grant management, the solution handles the individual cases as well as prioritization between them and payout. The solution both allows applicants to apply for grants to change the land use on vulnerable drinking water reserves, and a subsidy targeted at old wells that represent a potential source of contamination.

DEPA starts the process by opening a master case for every round of applications. This allows for the self-service application on the agency website to open. The applications rely on GIS documentation for the land involved. After screening the cases are prioritized, and awarded grants can move to payout.

The master case is updated each step of the way, so that aggregated funds applied for, awarded and paid out are always accurate.

As part of the annual budget agreement it was important that funds allocated in the fiscal year was put to use. The Danish Environmental Protection Agency went live with a full circle digital solution only few months after the legislation went through parliament. This was possible because the standardized base model serves as best practice for all grant management leaving the implementation of new programs to be copy-and adapt from existing solutions.

Efficient wastewater inspections

Environmental policing and inspections are prerequisites to sound environmental governance. With scarcity of resources, efficient digital management of inspections is an opportunity to strengthen both efficiency and transparency in this challenging domain.

The Danish Environmental Protection Agency (DEPA) is charged with the inspection of wastewater companies, treatment plants and stormwater outfalls related to wastewater treatment and discharge. The supervision builds on a municipalr esponsibility for wastewater facilities, where incident reports trigger an inspection. Adding to this, 18,000-20,000 rainwater overflow outlets are inspected.

To facilitate this task, the DEPA combines administrative inspections with a call for information to water companies with on-site inspections and incident-caused inspections.

Previously it was hard to get a central overview of activities in the department and there was a lack of overview and maintenance of data sources. The digital inspections solution serves and combines all necessary purposes and was implemented in 7 months.
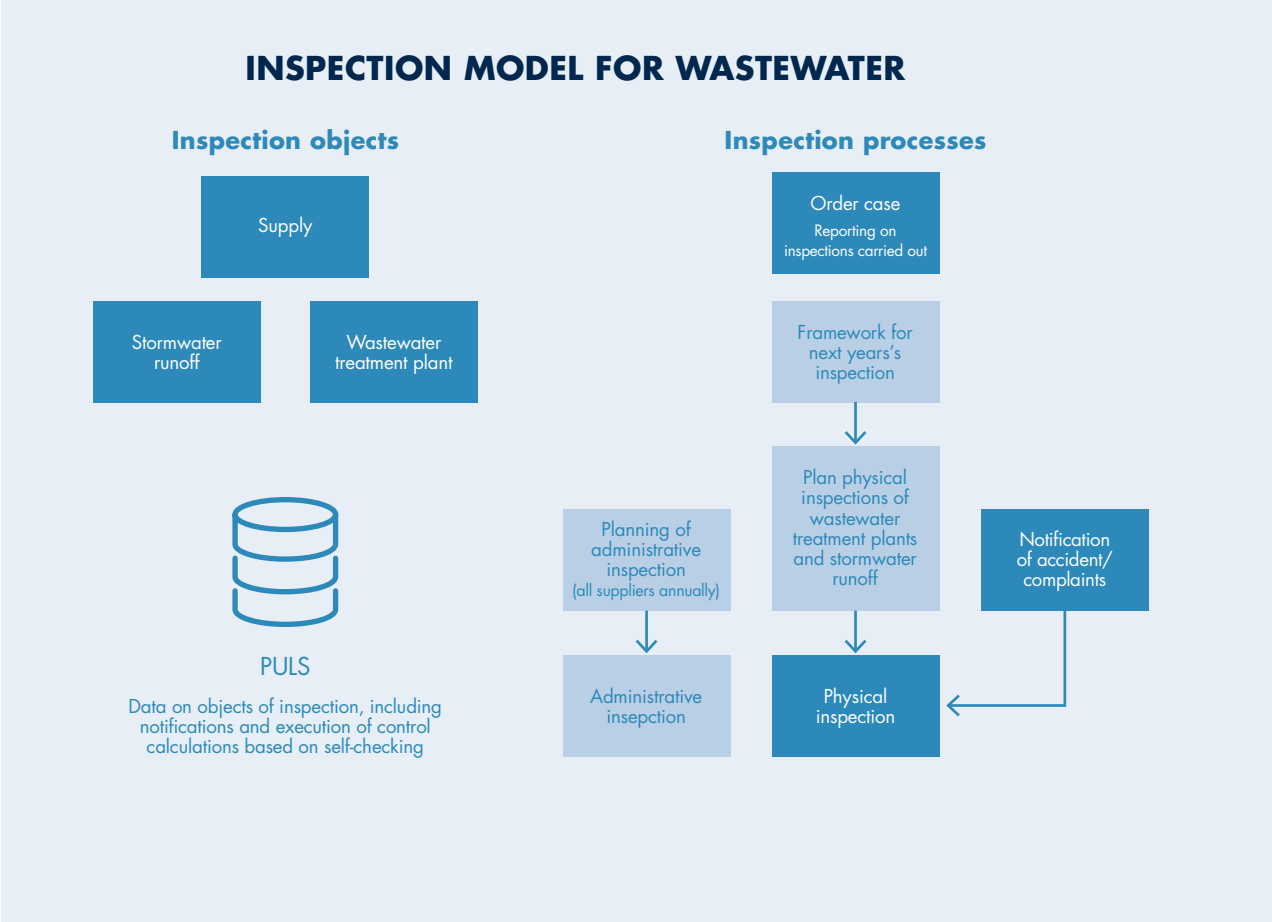
The new digital wastewater solution maintains a base register of all objects that are the focus of the inspection: rainwater overflow sites, water companies and their wastewater treatment plants, etc.

The solution couples the hierarchy and relation of the elements and the history of reporting, inspecting and incident handling, which is recorded and displayed centrally in one single system.

Annually, an inspection theme is decided at a wastewater summit. Based on this, an inspection case is developed. A call for information is sent out to water companies. Data is automatically transferred to a self-service form for inspectors, who conduct the respective site visits. The inspection data is stored in the base register and keeps track of inspection history. In combination with the incident-based inspections, this gives the authorities a coherent governance system.

DEPA now has a much better overview and ability to plan their inspections. The increased efficiency makes it possible to focus their resources on the actual inspections.

INSPECTION MODEL FOR WASTEWATER

Inspection objects

Supply

Stormwater runoff

Wastewater treatment plant

PULS

Data on objects of inspection, including notifications and execution of control calculations based on self-checking

Inspection processes

Order case
Reporting on inspections carried out

Framework for next years's inspection

Plan physical inspections of wastewater treatment plants and stormwater runoff

Planning of administrative inspection (all suppliers annually)

Notification of accident/ complaints

Administrative insepction

Physical inspection

Applied Climate Software for Governments

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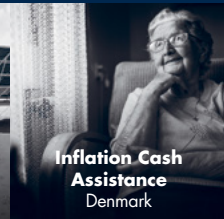www.cbrain.com

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Energy Efficiency

Home Energy Audit
Denmark

Energy Efficiency in Companies
Egypt

Inflation Cash Assistance
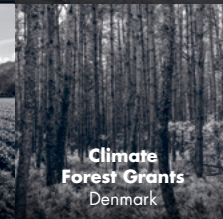Denmark

Heat Pump Grant
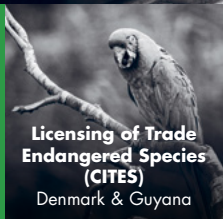Denmark

Sustainable Land Use

Climate Lowlands
Denmark

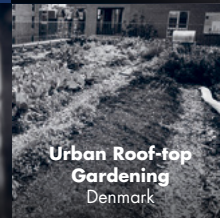**Sustainable Land Initiative**
USA

Climate Forest Grants
Denmark

Protection of Biodiversity

Licensing of Trade Endangered Species (CITES)
Denmark & Guyana

EU Natura 2000 Protected Areas
Denmark

Urban Roof-top Gardening
Denmark

Wildlife Regulation
Denmark

Circular Economy and Waste

Extended Producer Responsibility
Kenya

International Waste Export and Import
Denmark

Protection of Nature

Dredging
Denmark

Lake and Stream Restoration
Denmark

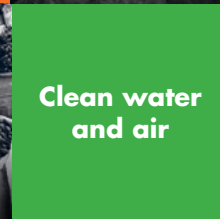**Environmental Support in the Arctic**
Denmark

Genetic Resources

License and Control of Genetically Modified Organisms
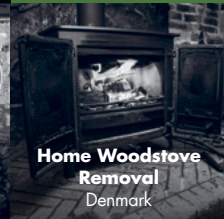Denmark

Access Benefit Sharing Nagoya-convention
Denmark

Clean water and air

Drinking Water Protection
Denmark

Waste Water Control
Denmark

Home Woodstove Removal
Denmark