

## **Soil and Groundwater**

### **Benchmark:**

- The quality of drinking water resources is so good that simple water treatment is sufficient before supplying the water to the consumer.

”Simple water treatment” means oxidation and filtration of the pumped groundwater. ”Simple water treatment” does not cover treatment with carbon filters or other treatment, and it does not cover dilution of contaminated groundwater.

### **Benchmark:**

- The Dogma municipalities do not consume more groundwater than what is regenerated in the catchment areas, and the water flow in watercourses and the water level in wetlands provide an optimum basis for a good ecological state.

”Good ecological state” first and foremost means that there must be good living conditions for animals and plants. Human impacts on animals and plants must only lead to minor deviations in the species composition and number of individuals compared to what we would see under untouched conditions.

### **Benchmark:**

- The quality of soil in the Dogma municipalities is so high that residents’ health is protected

”High soil quality” means that the current soil quality criteria are complied with. Soil quality criteria are limit values for soil determined by the Danish Environmental Protection Agency based on health criteria.

## **Nature**

### **Benchmark:**

- Residents have attractive, recreational opportunities in nature, and rich biological diversity is ensured. Management of nature areas takes place exclusively according to ecological principles.

Nature is broadly defined as green areas and blue areas (water courses, lakes, coastal zones etc.) with some extent of natural content. Agricultural land, fallow fields and plantations are not covered by the definition of nature.

Biological diversity means the diversity of living organisms in all environments, both on land and in water, as well as the ecological interplays the organisms are part of.

Attractive, recreational opportunities in nature means a combination of accessibility (distance and access) and contents (amenity value and opportunities for self-expression).

Ecological principles are defined as management without the use of pesticides and fertilisers and with grazing (sheep, cattle etc). Chemical herbicides or insecticides should not be used.

The benchmark reflects that in the Dogma municipalities we must work simultaneously for creating good opportunities for residents to get nature experiences (including parks, playing fields etc.) and for this to happen in such a way that a rich biological diversity is ensured. This is a balance which is crucial and which sets high requirements for long-term sustainable planning in the field of nature.

## **Chemicals**

### **Benchmark:**

- Use and release of substances and products that are harmful to human health and the environment has ceased in the Dogma municipalities.

Substances that are harmful to human health and the environment in this context means the substances on the list drawn up by the Life Project Group for Chemicals. The list covers 120 of the most problematic substances/substance groups. In the selection of substances and substance groups, the project group has had particular focus on substances on the list of undesired substances from the Danish Environmental Protection Agency, or on whether they have proved problematic in connection with the municipality's own work.

Dogma municipalities in this connection means the municipalities as a geographical area, meaning residents, enterprises and the municipality as an enterprise.

## **Waste**

### **Benchmark:**

- Waste management in the Dogma municipalities does not lead to adverse effects on the environment

Management should be understood in a life cycle perspective, meaning from the waste arises until it has been collected, transported and treated or recycled.

Dogma municipalities means the geographical area, covering waste from residents, enterprises and the municipality itself.

Adverse effects on the environment is here defined as a combination of resource use (wood, metals etc.) and various categories of environmental impacts (greenhouse effect, ozone depletion, toxicity etc.). Environmental impacts are calculated by use of a model, which is being developed at the Technical University of Denmark.

## **Energy**

### **Benchmark:**

- Emissions of greenhouse gases in the Dogma municipalities have been reduced to 0.5 tonnes of CO<sub>2</sub> per year and per capita

This target corresponds to the calculations of the ecological space per capita worldwide made by IPCC, Intergovernmental Panel on Climate Change.

## **Air**

### **Benchmark:**

- Emissions to the air in the Dogma municipalities are free from substances that are harmful to human health and the environment

Dogma municipalities means the municipalities as a geographical area, i.e. residents, enterprises and the municipality as an enterprise.

”Free from substances that are harmful to human health and the environment” means that all current limit values are complied with for both substances with regional and local impact – i.e. that both health and environmental aspects are taken into consideration.

## **Noise**

### **Benchmark:**

- Residents in the Dogma municipalities should not be exposed to noise from the surroundings in their home or in the public space, to an extent that is hazardous to health.

”The public space” means first and foremost parks, natural areas and similar places where residents may expect to find peace and quiet. ”Exposed to noise from the surroundings to an extent that is

hazardous to health” means noise from traffic, industry etc. exceeding the limit values and assessment criteria set up by the Danish Environmental Protection Agency.

## **Planning**

### **Benchmark:**

- Planning in all areas takes place in an environmentally sustainable manner. Environmental assessments are used as a natural part of the planning process

Planning means physical planning.

Planning is one of two areas that are tools to ensure that we can achieve the state described in the benchmarks for the other areas (noise, waste, nature etc.). This means that the benchmark for planning does not describe a state, but rather a process. This gives special challenges in the development of indicators describing how far we are from the benchmark. The test of the benchmark and indicators will show whether it makes sense to maintain this area as part of the overall model for green accounts.

## **Anchorage**

### **Benchmarks:**

- Citizens and enterprises act in an environmentally aware manner and commit themselves actively in an environmentally sustainable development.
- The politicians and staff of the Dogma municipalities are visible driving forces in sustainability by preventing and reducing both resource consumption and environmental impacts. This should take place in a focused and persistent manner, it should apply to the municipality’s activities, and it should consciously bring an impact on the surrounding world.

In parallel to planning, anchorage is a tool that should ensure that we can achieve the state described in the benchmarks for the other areas. Also here there are special challenges in the development of indicators. The test of the benchmarks and indicators will show whether it makes sense to maintain this area as part of the overall model for green accounts.