

## Indicators for the Scheldt Estuary

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Policy and management of the Scheldt Estuary are a transnational issue which concerns both Flanders and the Netherlands. Since the end of the last century, Flanders and the Netherlands aim to adjust their policies and ideas as much as possible. This resulted in 2001 in the Long-Term Vision (LTV) of the Scheldt Estuary (Directie Zeeland AWZ, 2001) which was drafted by the Technical Scheldt Commission. An important part of the LTV is the 'Target 2030' ('Streefbeeld 2030') which, by 2030, aims for a healthy and multifunctional Scheldt Estuary, used in a sustainable way for human needs. The strategy to be followed in order to achieve the 'Target 2030' is written down in the 'outlines of development' of the Scheldt 2010.

In order to evaluate and support policies, it was decided to start up, within the framework of the LTV, a joint research and monitoring program which is known as the 'working group on research and monitoring' (WG O&M). One of the tasks which were performed in this group is the development of a set of indicators in order to provide a concrete content for the development of the Scheldt Estuary (Lescrauwaet *et al.*, 2009).

This project aimed to compile the latter set of indicators for the Scheldt Estuary based on facts and figures: policy-relevant indicators which are scientifically underpinned, quality-controlled data and a correct citation of the source (authors, data managers) and methodology. A number of strategic and specific objectives were envisaged (Lescrauwaet *et al.*, 2009):

### Strategic objectives

- Gaining understanding of cause-effect relationships for advising policy makers and managers.
- Situating gaps in our knowledge and providing direction for future research within the LTV Research and Monitoring program.
- Establishing an educational and outreach function, in order to clarify the ecological and socio-economic functioning of the system and to be able to communicate about the boundary conditions.

### Specific objectives

- Selecting, developing and visualizing a set of indicators that has an impact on, or is characteristic for an integrated vision on the safety, nature and accessibility of the system, as well as for fishery and recreation and tourism. This also means that the comparability of the measurements and analysis-methodologies and the differences in the standard specifications between Flanders and the Netherlands are accounted for.
- Updating the ScheldeMonitor, in addition to the data portal, as a portal site for the Scheldt Estuary.

In total, a set of 18 indicators was selected for the Scheldt Estuary. Each indicator was reported according to a fixed pattern: Key message, Why monitor this indicator?, What does the indicator show? Where do the data come from?, Opportunities and threats and, finally, integration with other indicators/measurements. Furthermore, technical sheets with specifications of the measurements of the indicator with metadata were supplied. The Scheldt indicators are embedded in the site of the ScheldeMonitor (<http://www.scheldemonitor.be/indicatoren.php>), where they are offered in combination with an information system (a data portal containing all metadata about projects, institutions, datasets, researchers ...).

### References

Directie Zeeland; Ministerie van de Vlaamse Gemeenschap. Administratie Waterwegen en Zeewezen 2001. Langetermijnvisie Schelde-estuarium. Ministerie van Verkeer en Waterstaat. Directoraat-Generaal Rijkswaterstaat. Directie Zeeland/Ministerie van de Vlaamse Gemeenschap. Departement Leefmilieu en Infrastructuur. Administratie Waterwegen en Zeewezen: Middelburg, The Netherlands. 86p.

Lescrauwaet A.-K., H. Debergh, K. Deneudt, J. Mees and F. Hernandez. 2009. Indicatoren van Duurzame Ontwikkeling voor het Schelde-estuarium. IDO-Schelde. Visiedocument als toelichting van de opmaak en doelstellingen van een set indicatoren van duurzame ontwikkeling voor het Schelde-estuarium in het kader van de langetermijnvisie 2030[S.n.]: Oostende, België. 9p.