



Pioneering Web intelligence technology

UNEP has partnered with MODUL University Vienna to develop a smart web intelligence solution for the environment. The platform can make key contributions towards meeting agreed environmental goals and foster sustainable development.

This extensive online platform analyzes and interlinks global environmental indicators and communication flows to analyze both individual and relevant public opinion trends e.g. in air quality, biodiversity and climate change etc. from news channels, social media, online publications, environmental organizations, partners and stakeholders.

The technology aligns and compares environmental indicators from structured sources with relevant documents and postings from these online sources. This will provide decision makers with web intelligence about **stakeholder opinions** and **trends** in the public discourse – in **real time** and in **multiple languages** – using advanced visualizations. The collected information is important for obtaining a comprehensive and authentic reflection of current opinion on issues such as climate change.

Data mining and processing using this [webLyzard](#) technology was designed to differentiate the environmental data gathered. Purely factual information is automatically distinguished from individual, emotionally-driven expressions of opinion using the latest text mining methods to capture stakeholder perceptions of sustainability issues in real time.

This facilitates the identification of opinion leaders and structures the online dialog in terms of prevailing topics and geographic location. The system also aligns social media postings with specific environmental indicators to provide intuitive visual tools to explore communication threads in a specific context. This will help environmental stakeholders to **understand contested issues**, track the **evolution of public dialog** over time, and identify priority environmental indicators that are **shaping public opinion**.

Searching the web intelligence functionality on UNEP Live provides citizens and organizations access to an **interactive visual dashboard** to explore the latest environmental information. *Word trees*, for example, show in which context terms such as “air quality”, “biodiversity” or “climate change” are discussed around the world. *Geographic maps* display origin and location targets of a communication, making it easier to track emerging stories and environmental trends. *Entity maps* enable users to explore relations among different organizations, individuals, or places.

Overall, the Web intelligence platform provides effective ways to retrieve the most relevant content from a comprehensive environmental knowledge archive. Opinions of key organizations and individuals alike will be automatically captured and put into perspective. This will allow users to spot geographic patterns, identify shifts in opinions on environmental matters, and track the influence of stakeholders on a given public discussion. This kind of information is highly valuable to decision makers and supports efforts to increase environmental literacy.

UNEP Live – UNEP’s online knowledge management platform is available at uneplive.unep.org

MODUL University Vienna is an international private university in Austria owned by the Vienna Chamber of Commerce. The research of the [Department of New Media Technology](#) focuses on the impact of online media and social network platforms on stakeholder communication and public opinion-formation processes, and on how such processes can be recorded, analyzed and visualized using semantic technologies.