

The Cabauw Emission indicator for the Netherlands.

A.Hensen, A. Frumau, D. van Dinther, W.C.M. van den Bulk, A.T. Vermeulen

Emission estimates for greenhouse gases over the Netherlands are available from the emission inventory activity that reports to UNFCCC. Also there are the inverse modelling results from EU projects like NitroEurope or InGOS. These two methods are complementary but share one thing, it takes more than a year to get the results. Meanwhile the tall tower measurement systems by now provide near real time data, showing increasing and decreasing concentration levels on a daily basis. In this talk we show how relatively simple calculation methods can generate an emission indicator that provides insight in the emission on the scale of the Netherlands. The Cabauw tall tower data series is used to show the indicator value from the 90's until now and compares this with the officially reported data. In short, this looks nice for CH<sub>4</sub>, indicates a problem for N<sub>2</sub>O and has a CO<sub>2</sub> surprise in store..... If the indicator concept works, near realtime concentration data can be quickly turned into emission trend data. With a delaytime of only a month.