Energy and Carbon

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How to diminish the carbon footprint of asphalt roads

The carbon footprint of roads is significant. Of course traffic is the key contributor, but also during construction and maintenance of roads enormous amounts of CO2 are released. Reducing the carbon footprint related to climate change is a worldwide challenge. In many countries this has been recognised and actions are being taken to reduce the carbon footprint related to roads. Different parties have different responsibilities in road construction. Clients can influence contractors and producers and vice versa.

In the presentation some insight will be given in the carbon footprint of asphalt roads and the possibilities to influence this. This has both a technical aspect (what is possible) and a contracting aspect (how to make it possible, what is the price one is willing to pay for CO2 reduction, how to stimulate industry to come forward with innovative sustainable solutions). Attention will be paid to the need for standardisation in methods in an early stage to prevent everyone inventing their own wheels.



Jan van der Zwan graduated as a chemical engineer at the Technical University of Delft.

He has been employed since 1978 by Rijkswaterstaat (Dutch Public Works Department; RWS) of the ministry of Infrastructure and the Environment. Present he is working at the Centre for Transport and Navigation (DVS) within RWS. DVS is a consultancy institute within the Public Works Department

In his career he has fulfilled different management and staff functions. The key issues have been road building and materials technology (more specific flexible pavements and asphalt technology) and sustainable development and recycling. Present he is Coordinating Advisor with responsibilities in sustainable development and quality management in new performance contracts in road construction.

He represents his organisation and the ministry in several national and international committees.