

# **CONCRETE ROADS:** A SMART AND SUSTAINABLE CHOICE

Is the road that was good in the past, good enough for a sustainable future?

'Sustainable roads make efficient use of natural resources and respect the environment during their entire life cycle; they improve transport facilities for the entire community, they provide services to society in terms of mobility, safety and comfort by means of judicious choices regarding design, construction, maintenance and demolition'



### > Environment

- In a life cycle approach, concrete roads compare favourably.
- As a result of their stiffness, concrete roads reduce fuel consumption and CO<sub>2</sub> emission (for trucks even up to 3.9 %).
- 10 to 25% of the CO<sub>2</sub> released in the production and construction of a concrete road, is absorbed again during its lifecycle.
- Concrete is a chemically stable material that is safe for soil and groundwater.
- At the end of its life, a concrete road can be **100% recycled**.
- The bright colour of concrete limits the heating-up effect and smog formation in urban areas.





# > Society

- The **low maintenance** of concrete roads increases availability and reduces traffic congestion.
- Long life skid-resistance and evenness of a concrete road surface, no rutting, guarantees safety and comfort.
- Concrete surfaces improve night vision and road safety.
- Low noise solutions are possible without compromising road safety.
- An **incombustible** and **non-toxic** concrete pavement contributes to **fire safety in tunnels**.



### omy perity"

# > Economic factors

- The long lifetime and low maintenance characteristics make concrete roads up to 25% cheaper in the long term.
- Due to the bright colour of concrete the investment and electricity costs for lighting may be reduced by 30%.
- Competition in materials for road construction has a **positive impact** on the market situation.







# 'CHOOSING A CONCRETE ROAD IS CHOOSING A SUSTAINABLE SOLUTION'

The full publication focuses on international experience to show that the modern concrete road can be a sustainable solution for our society and that it satisfies the basic criteria for sustainable construction in respect of environment, economy and society. The full publication can be requested at:

#### EUPAVE

(European Concrete Paving Association) Vorstlaan 68 Boulevard du Souverain 1170 Brussels T + 32 2 790 42 06 F + 32 2 640 06 70 info@eupave.eu www.eupave.eu

