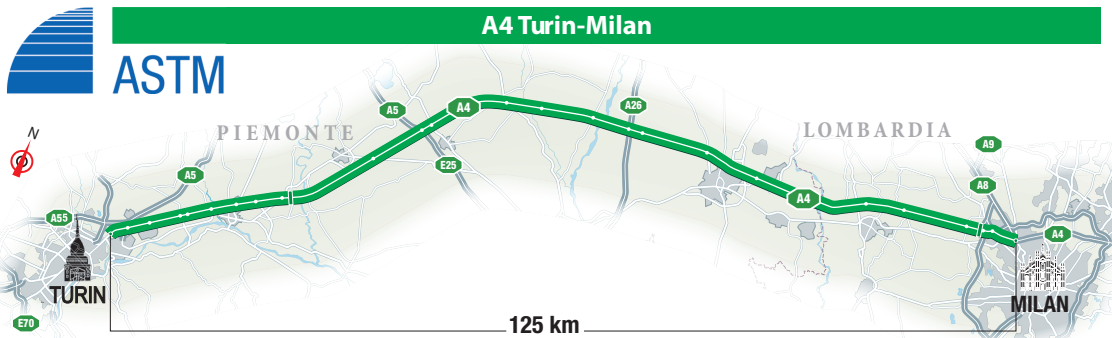


A4 Turin-Milan: 1st Green & Hi-Tech Motorway in Europe w/graphene, recovered hard plastics and 70% recycled asphalt

The repaving of 250 km of slow lane (125 + 125) of the A4 To-Mi Motorway, managed by ASTM Group, is underway. GIPAVE® and 70% recycled asphalt will make the highway super-sustainable and safer.



The big advantages for the environment

*Source: Studio di Alma Mater Studiorum di Bologna

-30%



Energy Savings (estimated to be circa **90 million kWh**), equal to the annual energy needs of c. **30,000 families**.

-38,5%*



-**18,350,000 kg of CO₂e_q emissions** equal to the absorption action of about **115,000 trees**.

-40%



Savings of bitumen (equal to almost **23 million kg**) and of **aggregates** (circa **480 million kg of raw materials** extracted from quarries w/large **savings also of soil**).

1.500



Tonnes of reused hard plastics (almost equal to the **weight of over 1,200 cars**).

+75%



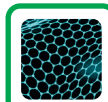
Increased pavement durability versus the best technologies currently used on the market.

Composition of GIPAVE®



GIPAVE® is the innovative, green technology for durable and sustainable asphalts.

Selected recovered hard plastics (such as toys, fruit crates and litter bins), otherwise not reusable and destined for less sustainable disposal methods (G.Eco - A2A Group)



Graphene*
(Directa Plus)



Functional Base



*Graphene is a new material that has the theoretical strength of diamonds and the flexibility of plastic. For their discoveries on graphene, two physicists, Andrej Gejm and Konstantin Novosëlov from the University of Manchester, won the 2010 Nobel Prize in Physics.



Gipave® is a completely Italian patent developed by **Itechimica** with the collaboration of G.Eco (A2A Group), the University of Milan Bicocca and Directa Plus.