

PILKINGTON's EU COVID Recovery Plan for an ecological transition

Coated and self-cleaning glass are nothing new to the glass industry and building sectors, but when we consider the present CO₂ levels and NO_x pollutants, it is clear that the use of these glass types is becoming more and more important — especially in our modern cities.

Glass products that reduce pollutants and save water and electricity can make a major contribution to the common effort regarding the EU Recover Plan, even more so considering that CO₂ emissions have largely exceeded the pre-pandemic values, but also the pollutants caused by human activities are often above acceptable threshold levels, especially in areas where difficult landscapes and geographical characteristics may cause particular problems.

Moreover, in our towns and cities, traffic and central heating release dangerous pollutants into the atmosphere, primarily nitrogen oxides, widely known as NO_x. Worryingly, a new study suggests that that exposure to these nitrogen oxides and particulate matter in childhood may cause mental illness and disorders in early adulthood.

Tests verifying the photocatalytic action of Pilkington Activ™, the first glass to be certified for its self-cleaning performance,



show it can make a major contribution towards reducing NOx levels in the atmosphere.

COATED GLASS

It is a well-known fact that the titanium dioxide coating on the glass uses the action of sunlight to decompose organic dirt, and then the hydrophilic behaviour facilitates its removal by the next rainfall. Additionally, the Pilkington Activ™ coating is able to break down nitrogen oxides. For example, on a 2,500 square-metre Pilkington Activ™ façade, as much NOx as emitted by up to 20 cars travelling an annual distance of 14,000 km per year, can be absorbed – depending on the type of engine.

Furthermore, Italian research has shown that the photocatalytic surfaces placed on a façade are able to break down all volatile organic compounds (not only NOx), due to their

oxidative action.

The same benefit is obtained by installing the dual-coated Pilkington Activ Suncool™ glass, which can also take credit for increasing the environmental performance of

building façades with solar control characteristics, as well as reducing internal radiation and avoiding the use of air-cooling systems.

AESTHETIC APPEARANCE; ENERGY EFFICIENCY, SAFE AND EFFICIENT CLEANING

At the moment of writing we do not know how each Member State will define its Recovery and Resilience Plan, nor how much the final cost of the individual measures will be.

We can, however, say that as well as improving the aesthetic appearance of a building, this type of glass provides energy efficiency, safe and efficient cleaning operations (less water and

detergent are required) and occupier comfort. Thus, it is the ideal product for curtain wall glazing, creating consistent and cost-efficient attractive glass façades and giving clearer, better-looking windows.

By using Pilkington Activ™ everyone wins, but above all, the environment benefits.

NSG GROUP

The NSG Group is the world's leading supplier of glass and glazing systems in the business areas of Architectural, Automotive and Creative Technology. In 2006 it acquired the leading global glass supplier, Pilkington, and today, the Group has principal operations around the world and sales in over 100 countries. Architectural manufactures and supplies architectural glass as well as glass for the solar energy and other sectors. Automotive serves the original equipment (OE) and after-market replacement (AGR) glazing markets. Creative Technology comprises several discrete businesses, including lenses and light guides for printers and scanners, and speciality.



Pilkington Italia S.p.A.



PILKINGTON

Via delle Industrie, 46
30175 Venezia
Tel.: 0039-0415-334994
E-mail: assistentatecnica@NSG.com
www.pilkington.it
facebook.com/PilkingtonItalia