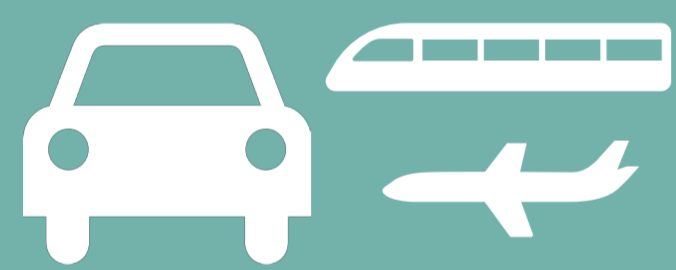


10 ways to combat NOISE POLLUTION

In the EU, more than 100 million citizens are affected by noise levels harmful to their health.



Road traffic is the major source of noise pollution, followed by railway and aircraft noise.



Noise pollution is associated with health effects, such as cardiovascular disease, sleep disturbance, stress, reduced cognitive performance, and psychological effects.



Implementation: Over 3,000 km of noise barriers have been installed alongside European rail networks. They are even more widely used alongside roads, including in Austria, Denmark, France, Germany, Italy, Poland, Spain & the Netherlands.

Implementation: European freight trains are being retrofitted with low-noise brake blocks. A complete ban on 'noisy' cast iron blocks is due to take place in Germany, the Netherlands & Switzerland in 2020.

Implementation: Traffic management strategies are widely used across Europe. In Paris & Valencia there is restricted access for heavy goods vehicles, while Annecy & Parma have implemented shuttle bus services to reduce private car use.

Implementation: A Norwegian study of façade insulation found an average noise reduction of 7 dB inside buildings & a 30% reduction in annoyance.

Implementation: Electric cars have the potential to reduce noise.

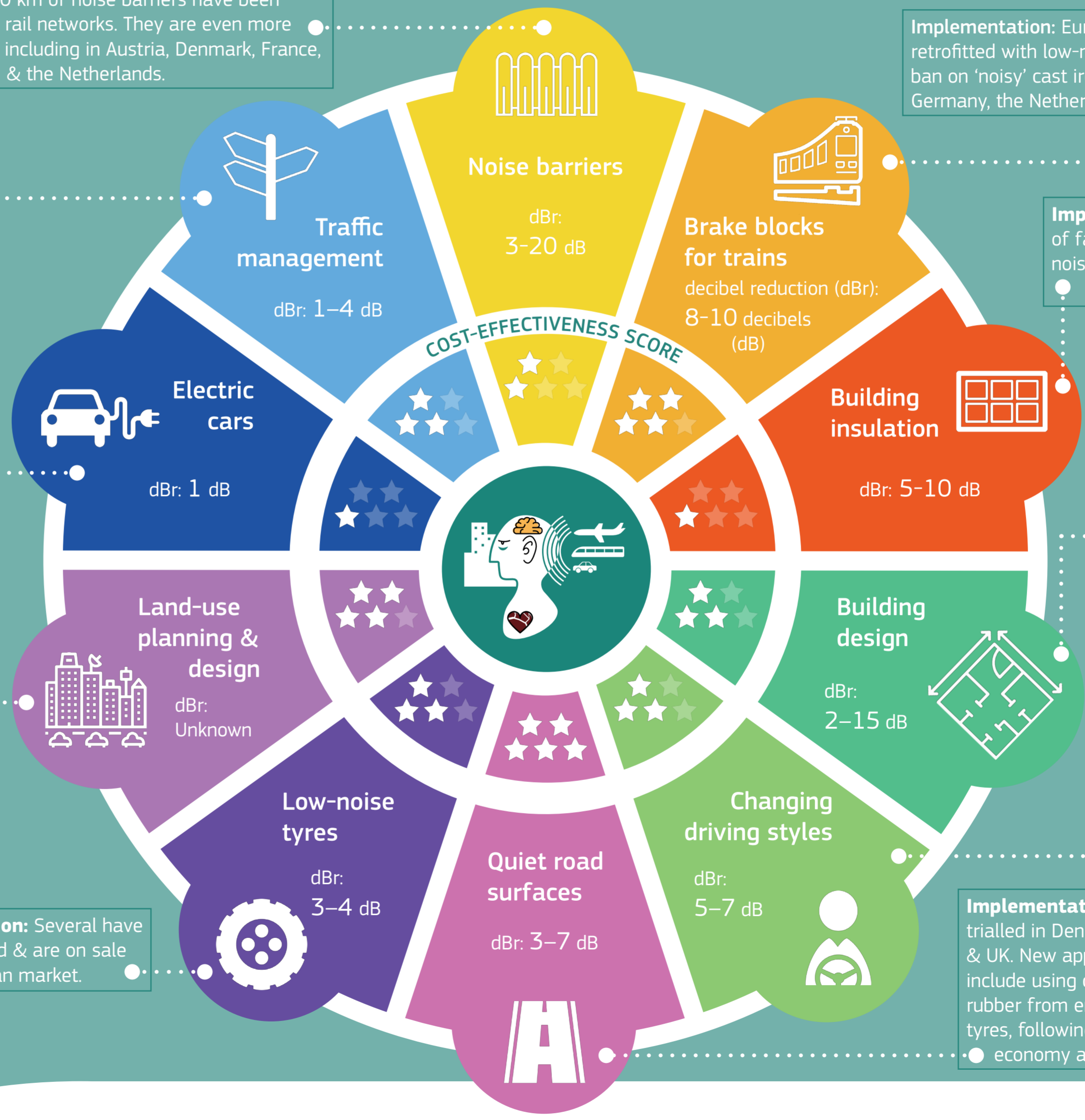
Implementation: It is unclear how widely acoustical architectural planning is used. Administrative action is needed for large-scale use.

Implementation: Computer models can predict noise exposure & identify areas unsuitable for development. No houses should be allowed under landing and take-off, for instance.

Implementation: Quieter driving could be incorporated into existing campaigns promoting 'eco-driving' to save fuel & reduce air pollution (e.g. <http://www.ecodriver.org>).

Implementation: Several have been developed & are on sale on the European market.

Implementation: Low-noise surfaces have been trialled in Denmark, France, Italy, the Netherlands & UK. New applications include using crumb rubber from end-of-life tyres, following a circular-economy approach.



For more information, see the SfEP Future Brief, 'Noise abatement approaches', or sign up for the Science for Environment Policy News Alert at <http://ec.europa.eu/science-environment-policy>

