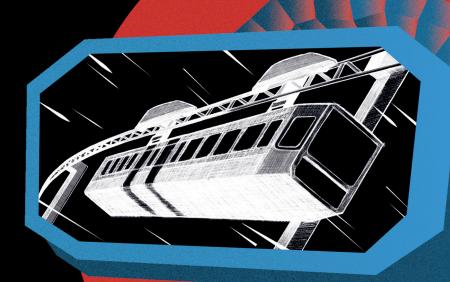


LOOKING FORWARD

The future of mobility



Overhead trains as a solution to UK road congestion & limited railway routes

Issue 1, 2022



Europe no longer has any excuse for ignoring Light Electric Vehicles in the fight against climate change

Flying taxis won't land in your backyard - getting cities ready for the third aviation revolution

Only a modal shift can prevent the impending climate disaster

Engaging customers with the transition to zero emission buses

How can we be better despite the pre-eminence of transport in our lives?

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Transport is vital, so think sustainably

e cannot be human if we cannot travel. History lesson aside, mobility is something that is intrinsic from centuries ago – our ancestors moved, and this movement is in our blood. Transport is a humanitarian issue too; people are unlikely to economically develop if they cannot access transport, and this is particularly true from a global perspective. For career progression and social mobility, we must move into cities. Despite the rise in remote working, this is especially the case in rural areas across the world where people rely on manual labour to work, earn money, and live a better life.

Aside from the economic benefits that access to transport brings, there are social and personal benefits too. The past few years have been exemplary of our reliance on transport for our social needs and mental wellbeing. Coronavirus has closed countries down, causing major travel disruption with people being forced apart for months - if not a year or two. We need transport to see our loved ones, in every corner of the world – whether it's by bussing to their house a few streets down or driving to an airport, getting on a flight, or sitting on a train to reach them. A major problem, of course, is how much this transport damages our environment through emissions and fossil fuel consumption.

Solutions to this problem have included electric vehicles, including buses and trains. Whilst this reduces emissions vehicles, in some countries which use coal for electricity, the benefits of electric vehicles will be damped. The emissions are occurring elsewhere in the process which is why we need to think about the sustainability chain. Can the electricity industry change to rely solely on renewables? Can transport operators elect to exclusively use renewable energy to charge their electric vehicles? Can the vehicles be safely made

Whether it's the climate crisis, deforestation or ocean pollution, sustainable living has, rightfully so, become the standard to live by. In order to be a functioning member of society, transport is vital – to enrich our lives, build a better livelihood and simply reach our workplaces. Therefore, most of us must commute and rely on emission-producing transport.

from old parts of damaged vehicles, thus manufactured in a more sustainable way? These are the questions we must ask ourselves and our organisations. A deep consideration on the succession of the sustainability chain is needed, from an individual buying a car, to a city investing in public transport vehicles

Sustainable transport demands holistic change from every industry, more smart cities are being planned so it is logical to reassess how we build and upgrade our world. If we are building new roads, are we considering the equipment which relies on fuel to build and lay new roads and bridges? Is there a way in which this can be sustainable? Can various industries work together, collaboratively, to create solutions? What about the materials? Sustainable transport is everyone's problem, not just car manufacturers or buyers.

Solutions for sustainable transport exist and need developments but a holistic approach with a carefully planned chain is the only future-proof way forward.

Take responsibility and be realistic

Defying convention is a step toward accountability, try to encourage this culture within your team, organisation, and perhaps even the sector. Everyone needs to recognise the vitality of sustainable transport solutions— no idea is too small or too big. And we need not fall to extremes like 'only use bicycles and horses'. Doctors need to get to hospitals, responders to emergencies, and our children to school—we cannot expect the world to move into a horse-carriage system or convince everyone to cycle. Whilst we can make those options available, our need to reach places urgently is important to consider. Can we create more energy efficient cars? Can councils optimise bus routes?

Maximise smart growth and increase public transport

We must also promote and strengthen new 'green' mobility offerings, by making these offers the most convenient option that's affordable and accessible for all. Smart growth would include moving public transport to renewable energy, implementing congestion charges or low emission zones as deterrents, or investigating the use of biofuels. For example, planning new transit routes and upgrading old ones so they are more sustainable, using more sustainable materials and equipment.

Engage with communities

Each town, city, state, and country operate differently. How are the people in a suburb able to move around? Is it the same as those in a city? Or what about the people living in the foothills in Pakistan – reliant on horses and motorcycles? Understanding the needs of people, for their livelihoods, medical treatments, schools, family visits and more should be considered when upgrading or building new systems of transport. Creating sensible low emissions zones with dedicated explanations for these changes, would enable engagement from residents - allowing them to be proud of their 'greener' roads. Most people agree that sustainable living is the way forward, communities want to understand, share, and get involved in facilitating developments.

Learn from others

We're already making great strides in sustainable transport; a long list of countries are phasing out petrol & diesel vehicles and there are many cities upgrading their roads for walking, e-scooters and bicycles.

- Zurich is one of the world's most sustainable cities, implementing an outstanding public transport system alongside urban planning which lets people get around easily. This includes accessible public transport with reduced fares, high toll rates for cars, and extra space for pedestrians and cyclists.
- Stockholm's public transport, including the metro, local trains and buses have been using 100 per cent renewable energy since 2017 which cuts down on carbon emissions.
 They have also introduced low emission zones with strict regulations on vehicles.
- Network Rail in London has used alternative materials such as plastic for train sleepers rather than steel or wood. The material is more lightweight in comparison to concrete and steel.
- Brazil uses ethanol from sugar cane which has a favourable energy balance. This cultivation is deemed better for the environment than fossil fuel alternatives. Considerations on how crops or materials are grown and processed, as well as the livelihoods of those responsible, is vital to ensure this remains a better option than traditional fuel. Biofuel can change the way we travel, in fact even Boeing have said that they will ensure their fleet of aircrafts can fly using biofuel by the end of this decade.

So what next?

Although we can fixate on carbon emissions caused by transport, which is a major cause of climate change and environmental damage, it's important to keep the sustainability chain in mind from beginning to end in the future. This grounds individuals as well as industries to the state of the environment and is an important consideration to successfully build better sustainable transport systems.

We cannot keep shifting responsibility of 'sustainable transport' onto consumers or manufacturers. Everyone must take the responsibility within their sector or organisations to consider the most environmentally sustainable options available for a given product or project, no matter how big or small. Only then can we move into a world where mobility and transport bring us together without damaging the world for future generations. Without travel we lose what it means to be human, and without sustainable transport, we cannot thrive.

