

Infrastructure in post-Covid future

Since 2017, Credit Suisse has been identifying and examining Supertrends – long-term societal trends that could lead to fast-growing business opportunities and enable investors to grow their capital. This year, Supertrends are confronting the post-Covid world, as governments, businesses and citizens look to rebuild for a more inclusive and sustainable future. These Supertrends are also now being mapped against the United Nations' Sustainable Development Goals (SDGs), which include climate action and reducing inequalities. The UN has estimated the annual SDG financing gap at US\$2.5 trillion, which speaks as well to the opportunity to invest with purpose. In this BT Explainer, we zoom in on the infrastructure theme.



ANXIOUS SOCIETIES

The Credit Suisse Anxiety Index shows that popular discontent remains on the up. While Covid-19 concerns have declined from a peak in April 2020, worries about crime, corruption, poverty and social inequality or unemployment have strongly risen in tandem. Housing affordability is a key issue, while talent management is coming to the fore amid work-from-home tensions, and the rise of automation.



INFRASTRUCTURE

As the world recovers from the pains of Covid-19, various countries are due to make an even greater effort to strengthen the backbone of their economies. One way to do this is by overhauling vital transport, power and telecom systems. The aim should be to build resilient infrastructure to reduce the risks related to extreme weather events and to replace outdated transport infrastructure that pose safety hazards.



TECHNOLOGY

A global pandemic has meant keeping a physical distance from one another to curb the outbreak. This drastic change has shifted thinking about how communication and collaboration tools can be better utilised. As the adoption of "touchless" user interfaces increases, it should create significant demand for artificial intelligence software, sensors, intelligent semiconductors, and other hardware.



SILVER ECONOMY

Credit Suisse has projected that the world's senior population will double to more than two billion by 2050. Biopharmaceutical, medical technology and life sciences companies that address conditions affecting the elderly through innovative products such as immunotherapies or antibody drug conjugates are firms to watch. Seniors are also a powerful consumer group with significant spending power.



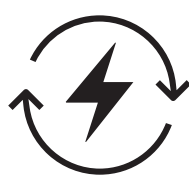
MILLENNIALS' VALUES

Younger generations have a lot of trust in online services – even when it comes to their money. They are moving away from traditional banking, often foregoing bank accounts and credit cards in favour of mobile wallets. Millennials are also thrusting biodiversity into the spotlight, by pushing companies toward greater sustainability within their supply chains.



CLIMATE CHANGE

Covid-19 has led to unprecedented financial stimulus to support economic growth, and many global infrastructure projects are tied to sustainability. Renewable companies remain firms to watch. Meanwhile, oil-and-gas majors continue their transition strategy, with many companies announcing more aggressive carbon emission reductions and even the new "holy grail" net-zero targets.



Renewable energy

For governments to meet the ambitious emission reduction targets in line with the Paris climate goals, the International Energy Agency (IEA) estimates that carbon emissions in power generation have to decline globally by 77 per cent by 2040. Specifically in Asia, given the sharp projected increase in electricity demand in the region from now to 2040, the fuel mix in power generation has to dramatically change. Simply put, the share of renewable energy must grow.

The solar photovoltaic (PV) market is set to expand massively, based on IEA's renewables outlook. In the next ten years, solar PV should grow by 13 per cent annually, according to the 2020 study. In 2023, solar PV electricity capacity is expected to have outgrown natural gas, followed by coal in the following year. Policy support combined with record-low interest rates are encouraging investment, while production costs are due to further decline. Supportive policies and governments in places such as the US, EU, China and India, are key drivers of this trend.

The IEA estimates that the world has to spend about US\$12.9 trillion in total between 2020 and 2040 to finance the required growth for renewable power generation infrastructure. In comparison, US\$1.2 trillion will be needed to add nuclear power capacity and US\$1.3 trillion for new thermal capacity from fossil fuels.



Green buildings

Building for the future

Building operational technology

- Building automation system
- Utility data
- Security
- Fire
- Heating, ventilation and air conditioning

Smart buildings



External information technology

- Weather
- Social media
- Work order
- Business data
- Ride share wait time

Source: Johnson Controls, Credit Suisse

An efficient building infrastructure has become the backbone of growing cities.

As mega cities are large carbon emitters, with the building sector accounting for a growing share of carbon emissions, the construction and retrofitting of building systems in large cities has to become smarter and more sustainable to make a tangible contribution to global carbon reduction efforts.

In order to meet the targets established in the Paris Agreement, the World Green Building Council estimates that all new buildings must reach net-zero emissions by 2030 and that all buildings have to operate at net-zero emissions by 2050. Only a very small percentage of buildings today are carbon-neutral, but there is strong political will for improvement.

Sustainable building solutions can also offer attractive financial returns as the construction of carbon-neutral buildings requires higher upfront capital investments in return for lower operating costs over the lifetime of a project. As the building industry also drives employment, a significant amount of fiscal stimulus is expected to be used to construct and retrofit buildings. This would allow policymakers to achieve goals of supporting the post-pandemic economic recovery, reducing energy demand, and cutting carbon emissions.



Infrastructure investments

Infrastructure spending is an important part of the fiscal stimulus packages that governments around the world are putting in place to revive their economies following the economic pains brought on by Covid-19.

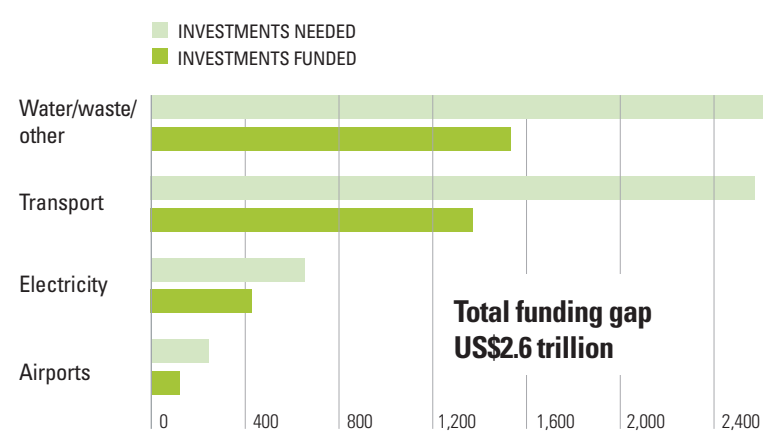
As for infrastructure projects, government focus has shifted to providing more support for sustainable infrastructure investments, as countries attempt to build a greener economy, and placing a greater focus on building climate-resilient infrastructure to protect the investment against the impact of climate change.

US President Joe Biden has unveiled a US\$2.3 trillion infrastructure programme, which would include about US\$700 billion for green initiatives related to electric vehicles infrastructure, electricity networks, energy efficient buildings, green technologies and clean energy manufacturing.

Over in Europe, the 750-billion-euro EU recovery fund is designed to build greener, more digital and more resilient economies, as well as to shore up struggling sectors. Meanwhile, China's pledge to become "carbon neutral" by 2060 signals an important infrastructure investment shift for the country's 14th Five-Year Plan starting in 2021.

US infrastructure needs by system

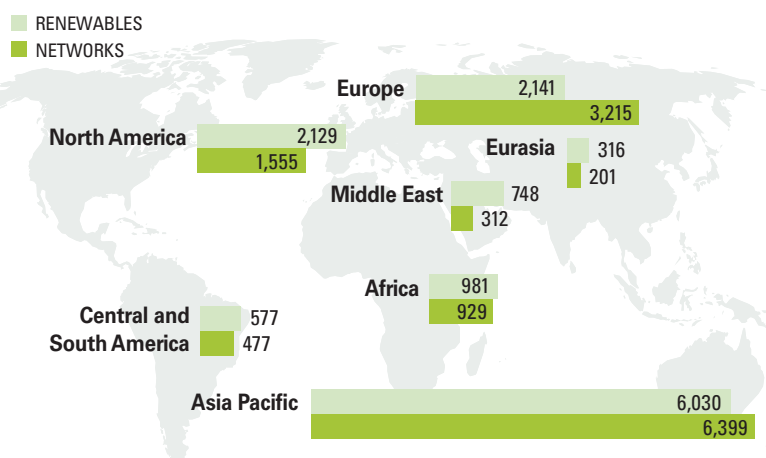
2020-29: US infrastructure needs and funding gaps (US\$b)



Source: American Society of Civil Engineers, Credit Suisse

The path to lower carbon emissions

Total renewables and network investments under the Sustainable Development Scenario from 2020 to 2040 (US\$b)



Source: International Energy Agency (World Energy Outlook 2020), Credit Suisse



"Governments, businesses, and citizens are now looking at how to 'build back better' in the post-Covid world. While the pandemic will eventually pass once vaccinations have been rolled out, the world will keep this goal firmly in mind to address the challenges that lie ahead for our shared future. Investors can play an important role by directing their capital toward investment solutions that participate in this effort. In other words, investing with purpose. As part of the Credit Suisse House View, our Supertrends thematic long-term equity framework provides investors with an avenue to do just that." – Benjamin Cavalli, CEO Singapore and Head of Private Banking South Asia.