

Smart Mobility

Q2 2023



Overview

- Smart mobility includes the integration of intelligent technologies in transportation, but it is also about governments, companies and individuals making smart decisions about their choices of mobility given the environmental and demographic challenges.
- The Paris Agreement, the COP27 and the IPCC climate study give an even greater sense of urgency to the adoption of zero-emission technologies, especially in transportation. Electricity, hydrogen, biofuels and ammonia are potential zero-emission or green fuels that should help reduce these emissions.

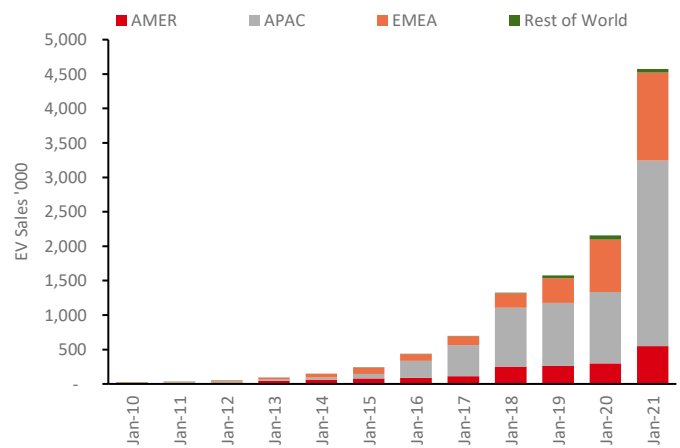
The Opportunity

- Electric vehicle (EV) purchases have accelerated significantly in the major economies, as consumer adoption gains momentum and new models are introduced.
- EV infrastructure is being added at a rapid pace in several countries to meet the growing demand.
- Battery technology continues to advance benefiting from increased R&D budgets and soaring applications.
- 5G networks are supporting in-vehicle and sensor technologies, connecting vehicles to the surrounding environment and other vehicles.
- Commercial vehicles and trains could benefit from the advancements in hydrogen fuel cell technology.

Why now?

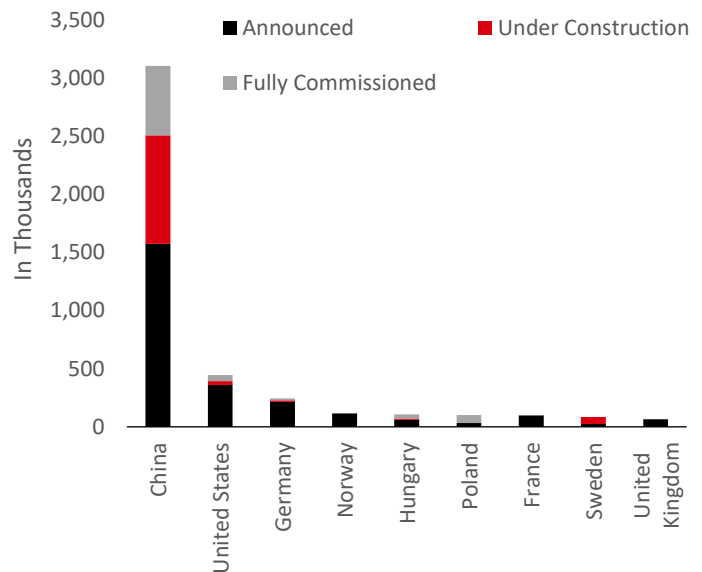
- Transportation companies and systems are being forced to phase out the use of fossil fuels over the next decade as countries strive to achieve net zero emissions.
- Technologies have advanced sufficiently to make alternative energy formats (lithium batteries, fuel cells, bio-fuels) to provide a viable, economic zero-emission alternative source of power to fossil fuels for transportation.
- Fiscal stimulus packages in several major economies have environmental and infrastructure provisions that should also provide some additional financial impetus.

Electric Vehicle Unit Sales by Region (in ,000s)



Source: Bloomberg, HSBC Global Private Banking, March 2023

National Utilised Capacity for Battery Manufacturing (MWh; in ,000s)



Source: Bloomberg, HSBC Global Private Banking, September 2022

Risk Disclosures

Risks of investment in fixed income

There are several key issues that one should consider before making an investment into fixed income. The risk specific to this type of investment may include, but are not limited to:

Credit risk

Investor is subject to the credit risk of the issuer. Investor is also subject to the credit risk of the government and/or the appointed trustee for debts that are guaranteed by the government.

Risks associated with high yield fixed income instruments

High yield fixed income instruments are typically rated below investment grade or are unrated and as such are often subject to a higher risk of issuer default. The net asset value of a high-yield bond fund may decline or be negatively affected if there is a default of any of the high yield bonds that it invests in or if interest rates change. The special features and risks of high-yield bond funds may also include the following:

- Capital growth risk - some high-yield bond funds may have fees and/or dividends paid out of capital. As a result, the capital that the fund has available for investment in the future and capital growth may be reduced; and
- Dividend distributions - some high-yield bond funds may not distribute dividends, but instead reinvest the dividends into the fund or alternatively, the investment manager may have discretion on whether or not to make any distribution out of income and/or capital of the fund. Also, a high distribution yield does not imply a positive or high return on the total investment.
- Vulnerability to economic cycles - during economic downturns such instruments may typically fall more in value than investment grade bonds as (i) investors become more risk averse and (ii) default risk rises.

Risks associated with subordinated debentures, perpetual debentures, and contingent convertible or bail-in debentures

- Subordinated debentures - subordinated debentures will bear higher risks than holders of senior debentures of the issuer due to a lower priority of claim in the event of the issuer's liquidation.
- Perpetual debentures - perpetual debentures often are callable, do not have maturity dates and are subordinated. Investors may incur reinvestment and subordination risks. Investors may lose all their invested principal in certain circumstances. Interest payments may be variable, deferred or canceled. Investors may face uncertainties over when and how much they can receive such payments.
- Contingent convertible or bail-in debentures - Contingent convertible and bail-in debentures are hybrid debt-equity instruments that may be written off or converted to common stock on the occurrence of a trigger event. Contingent convertible debentures refer to debentures that contain a clause requiring them to be written off or converted to common stock on the occurrence of a trigger event. These debentures generally absorb losses while the issuer remains a going concern (i.e. in advance of the point of non-viability). "Bail-in" generally refers to (a) contractual mechanisms (i.e. contractual bail-in) under which debentures contain a clause requiring them to be written off or converted to common stock on the occurrence of a trigger event, or (b) statutory mechanisms (i.e. statutory bail-in) whereby a national resolution authority writes down or converts debentures under specified conditions to common stock. Bail-in debentures generally absorb losses at the point of non viability. These features can introduce notable risks to investors who may lose all their invested principal.

Contingent convertible securities (CoCos) or bail-in debentures are highly complex, high risk hybrid capital instruments with unusual loss-absorbency features written into their contractual terms.

Investors should note that their capital is at risk and they may lose some or all of their capital.

Changes in legislation and/or regulation

Changes in legislation and/or regulation could affect the performance, prices and mark-to-market valuation on the investment.

Reinvestment risk

A decline in interest rate would affect investors as coupons received and any return of principal may be reinvested at a lower rate. Changes in interest rate, volatility, credit spread, rating agencies actions, liquidity and market conditions may have a negative effect on the prices, mark-to-market valuations and your overall investment.

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Risk disclosure on Dim Sum Bonds

Although sovereign bonds may be guaranteed by the China Central Government, investors should note that unless otherwise specified, other renminbi bonds will not be guaranteed by the China Central Government.

Renminbi bonds are settled in renminbi, changes in exchange rates may have an adverse effect on the value of that investment. You may not get back the same amount of Hong Kong Dollars upon maturity of the bond.

There may not be active secondary market available even if a renminbi bond is listed. Therefore, you need to face a certain degree of liquidity risk.

Renminbi is subject to foreign exchange control. Renminbi is not freely convertible in Hong Kong. Should the China Central Government tighten the control, the liquidity of renminbi or even renminbi bonds in Hong Kong will be affected and you may be exposed to higher liquidity risks. Investors should be prepared that you may need to hold a renminbi bond until maturity.

Alternative Investments

Hedge Fund - Please note Hedge Funds often engage in leveraging and other speculative investment practices that may increase the risk of investment loss. They can also be highly illiquid, are not required to provide periodic pricing or valuation information to investors, and may involve complex tax structures and delays in distributing important information. Alternative investments are often not subject to the same regulatory requirements as, say, mutual funds, and often charge high fees that may potentially offset trading profits when they occur.

Private Equity - Please note Private Equity is generally illiquid, involving long term investments that do not display the liquid or transparency characteristics often found in other investments (e.g. Listed securities). It can take time for money to be invested (cash drag) and for investments to produce returns after initial losses.

Risk disclosure on Emerging Markets

Investment in emerging markets may involve certain, additional risks which may not be typically associated with investing in more established economies and/or securities markets. Such risks include (a) the risk of nationalization or expropriation of assets;

(b) economic and political uncertainty; (c) less liquidity in so far of securities markets; (d) fluctuations in currency exchange rate;

(e) higher rates of inflation; (f) less oversight by a regulator of local securities market; (g) longer settlement periods in so far as securities transactions and (h) less stringent laws in so far the duties of company officers and protection of investors.

Risk disclosure on FX Margin

The price fluctuation of FX could be substantial under certain market conditions and/or occurrence of certain events, news or developments and this could pose significant risk to the Customer. Leveraged FX trading carry a high degree of risk and the Customer may suffer losses exceeding their initial margin funds. Market conditions may make it impossible to square/close-out FX contracts/options. Customers could face substantial margin calls and therefore liquidity problems if the relevant price of the currency goes against them.

The leverage of a product can work against you and losses can exceed those of a direct investment. If the market value of a portfolio falls by a certain amount, this could result in a situation where the value of collateral no longer covers all outstanding loan amounts. This means that investors might have to respond promptly to margin calls. If a portfolio's return is lower than its financing cost then leverage would reduce a portfolio's overall performance and even generate a negative return

Currency risk – where product relates to other currencies

When an investment is denominated in a currency other than your local or reporting currency, changes in exchange rates may have a negative effect on your investment.

Chinese Yuan (“CNY”) risks

There is a liquidity risk associated with CNY products, especially if such investments do not have an active secondary market and their prices have large bid/offer spreads.

CNY is currently not freely convertible and conversion of CNY through banks in Hong Kong and Singapore is subject to certain restrictions. CNY products are denominated and settled in CNY deliverable in Hong Kong and Singapore, which represents a market which is different from that of CNY deliverable in Mainland China.

There is a possibility of not receiving the full amount in CNY upon settlement, if the Bank is not able to obtain sufficient amount of CNY in a timely manner due to the exchange controls and restrictions applicable to the currency.

Illiquid markets/products

In the case of investments for which there is no recognised market, it may be difficult for investors to sell their investments or to obtain reliable information about their value or the extent of the risk to which they are exposed.

Environmental, Social and Governance (“ESG”) Customer Disclosure

“Sustainable investments” include investment approaches or instruments which consider environmental, social, governance and/or other sustainability factors (collectively, “sustainability”) to varying degrees. Certain instruments we include within this category may be in the process of changing to deliver sustainability outcomes.

There is no guarantee that sustainable investments will produce returns similar to those which don’t consider these factors. Sustainable investments may diverge from traditional market benchmarks.

In addition, there is no standard definition of, or measurement criteria for sustainable investments, or the impact of sustainable investments (“sustainability impact”). Sustainable investment and sustainability impact measurement criteria are (a) highly subjective and (b) may vary significantly across and within sectors.

HSBC may rely on measurement criteria devised and/or reported by third party providers or issuers. HSBC does not always conduct its own specific due diligence in relation to measurement criteria. There is no guarantee: (a) that the nature of the sustainability impact or measurement criteria of an investment will be aligned with any particular investor’s sustainability goals; or (b) that the stated level or target level of sustainability impact will be achieved.

Sustainable investing is an evolving area and new regulations may come into effect which may affect how an investment is categorised or labelled. An investment which is considered to fulfil sustainable criteria today may not meet those criteria at some point in the future.

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It is important to note that the value of investments and income from them can go down as well as up, meaning you may not get back the amount invested and you may lose some or all of your investment. This may also happen as a result of changes in the rate of exchange where overseas securities are held. Past performance is not a reliable indicator of future performance. The value of an investment and any income from it is not guaranteed. Your decision to invest should not be based mainly or solely on past performance. Forward-looking statements, views and opinions expressed, and estimates given constitute HSBC Private Banking’s best judgement at the time of publication, are solely expressed as general commentary and do not constitute investment advice or a guarantee of returns and do not necessarily reflect the views and opinions of other market participants and are subject to change without notice. Actual results may differ materially from the forecasts/estimates.

Foreign securities carry particular risks, such as exposure to currency fluctuations, less developed or less efficient trading markets, political instability, a lack of company information, differing auditing and legal standards, volatility and, potentially, less liquidity.

Emerging Markets: Investments in emerging markets may be extremely volatile and subject to sudden fluctuations of varying magnitude due to a wide range of direct and indirect influences. Such characteristics can lead to considerable losses being incurred by those exposed to such markets which may not be typically associated with investing in more established economies and/or securities markets. Such risks include (a) the risk of nationalization or expropriation of assets; (b) economic and political uncertainty; (c) less liquidity in so far of securities markets; (d) fluctuations in currency exchange rate; (e) higher rates of inflation; (f) less oversight by a regulator of local securities market; (g) longer settlement periods in so far as securities transactions and (h) less stringent laws in so far the duties of company officers and protection of Investors.

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