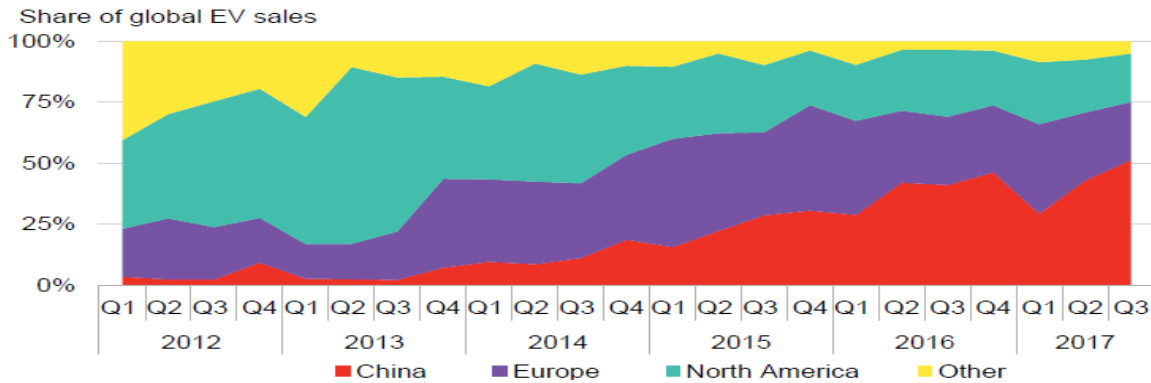


The Current Outlook:

As we reflect on 2017 with an eye to 2018, we are struck by the continued progression of clean technology, despite the negative sentiment of a year ago. While concerns were not baseless, much was made of the negative prospects for clean tech and new energy given an incoming Administration that denounced clean technology solutions in favor of fossil fuels, with a focus on coal power promotion. As the Trump Administration attempted to limit EPA oversight and walked away from a global solution to combatting climate change with the Paris Climate Accord, disruptive clean tech solutions continued to take share from old-line, traditional energy sources. There was talk of placing tariffs on solar module imports, scaling back solar incentives in the form of tax credits, and limiting federal rebates for EVs. While some of these concerns could materially impact portions of the clean tech sector, such as solar module tariffs, we manage GEOS with a focus on technologies that are commercially viable in the absence of government incentives. As we begin 2018, the global direction for clean tech is evident, continuing to stride in forward fashion.

Since the Trump Administration denounced the Paris Climate Accord, 250 U.S. cities, 12 states and 300 companies representing over \$6.5 trillion in market value have set climate targets, with more than 100 companies having committed to run their operations solely on renewable energy. The states, cities and companies formed the U.S. Climate Alliance and the Mayors National Climate Action Agenda to promote economic progress alongside climate action. Just prior to year-end, the U.N. published a report stating that the world is indeed de-coupling emissions from economic growth. Clean tech investment leads to economic growth, job creation, and a cleaner planet, which is why there is so much support for climate solutions. While it looks like the Federal EV rebate is in place in the current tax package, EV growth would remain at 30% globally in our opinion if the rebate were disbanded because clean tech disruption occurs globally, centered in the emerging markets. EVs only equate to 2% of global auto sales according to Bloomberg New Energy Finance (BNEF), but the rate of growth is considerable, with China driving demand as the chart below illustrates, given their horrible urban air pollution resulting on bans for internal combustion engines (ICEs).

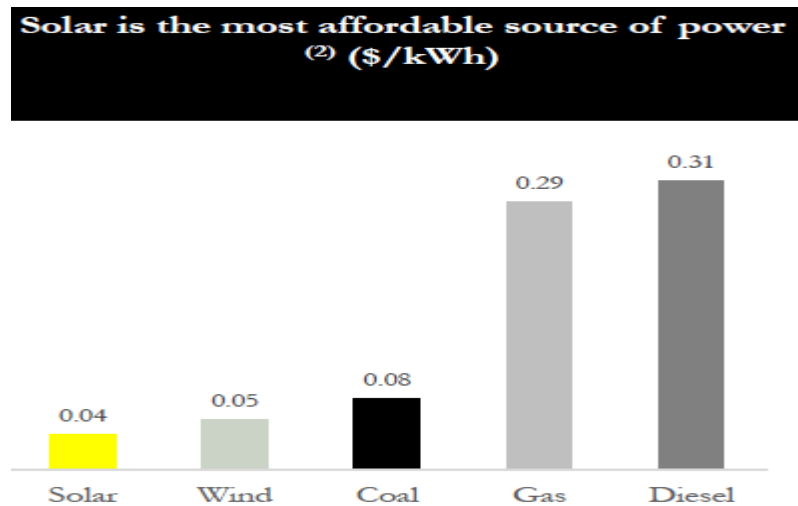
Figure 4: Global shares of passenger EV sales by region



Source: Bloomberg New Energy Finance, Marklines. Note: includes both BEVs and PHEVs. Passenger EVs only.

The two regions that have grown the fastest this year are China and Europe, with China representing 51% the global passenger EV market in 3Q 2017, up from 29% just two years earlier (Figure 4). Generous incentives and broader policy support all play a big role here. For more details on regional EV sales differences, refer to our 4Q 2017 Electrified Transport Market Outlook ([web](#) | [terminal](#)).

Regarding the prospects for rolling-back the tax credits for solar power in the U.S., the investment tax credits are structured to decrease in coming years because solar projects are now competitive with incumbent energy sources such as coal and natural gas. According to Lawrence Berkeley National Labs, North Carolina solar rates are now less than \$50/mega-watt hour, down 70% since 2009. While we believe portions of the solar industry such as modules do not make sound investments given severe margin erosion, we are constructive on solar rooftop installers in the U.S., given a mere 3% solar penetration rate of residential rooftops according to Goldman Sachs. Clean tech is driven by disruption in regions where there is no incumbent infrastructure. For example, with India, as the chart from current GEOS holding Azure Power demonstrates, solar is much cheaper and more flexible in a than logistically-challenging diesel fuel:



Source: Azure Power Global Ltd., Sept 2017

As we mentioned earlier this year, disruptive technology does not care who is in Washington. With successful and scaling clean technologies, more can be achieved with less. These technologies are adopted because they enhance the quality of life and save money, whether on a factory floor with robotics, on the farm with precision agriculture applications or in a city with traffic and energy management systems. Each of these solutions is represented by GEOS, achieving economic growth with enhanced productivity and lower environmental impact. We look forward to discussions on clean technology climate solutions as 2018 unfolds.

Disclosures:

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