

Insights into Emerging Economies Contents N°6, June 2016

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PERSPECTIVE ON ... Electric Mobility

Beyond the obvious



The major emerging countries – markets with a high growth potential for electric vehicles

By Joël Ruet et Fanny Costes

The massive take-up of electric vehicles and plug-in hybrids has not yet come to pass. But over the past five years, automobile markets have seen what seems to be a real turn of the tide. While in Europe, experts and stakeholders are happy enough to gauge the trend by looking at Norway and, to a lesser extent, France, we think that the main thrust to mainstream electric mobility will come primarily from the major emerging countries. On one condition – that the efforts of the public authorities are at least matched by those of the industrialists present in China and India in particular.

An European laboratory

Proportionally speaking, Norway is certainly the world's leading market for electric vehicles and plug-in hybrids. In 2015, these totaled 18.7% of the Kingdom's sales of passenger and light commercial vehicles, equivalent to 39,000 registrations. This means 90,000 electric vehicles in a country that has 2.5 million cars on the road. Also, its political ambition is quite simply for all new vehicles sold in 2025 to be electrically powered. A fine example admittedly, but the country's size means that it can hardly spearhead electric mobility on a planetary scale. But certainly it serves as a laboratory. France is the second biggest European market for electric vehicles in 2015, with 22,187 electric passenger cars and light commercial vehicles, cornering around 1% of market share. This 60% of increase since last year was encouraged by the government's incentives, which were increased n 2015.

These two examples highlight the slow but sure penetration of electric vehicles. And Europe – where total sales reached almost 100,000 in 2015, and 184,500 counting all rechargeable vehicles – offers a dynamic terrain to be developed.

China, the world's leading electric market in 2015

However, the real thrust is perceptible in the East, particularly in China and India. In China at least, the figures speak for themselves. As Avere (national association for electric mobility development) reports: "in four years, the electromobility market has exploded. Whereas there were no more than 5,200 rechargeable vehicles in 2011, the number of registrations has multiplied by 41 to reach 214,283 cars in 2015! Between 2014 (61, 984 units) and 2015 alone, the market has jumped up by 245%. Today, China represents 38% of the global market, compared with 10% in 2011." It should also be remembered that China, with some 200 million electric two-wheelers on its roads, is no novice in electric engines!

In India, sales are much lower. The political concern to deploy electric mobility dates back only three or four years. From March 2015 to March 2016, 22,000 electric vehicles were sold, which is up by 37.5% compared to the previous fiscal year.

Nevertheless, what needs to be kept in mind is that Europe's and North America's automobile fleets in are already in place. They will increase only marginally and be renewed little by little. In the large emerging countries, on the other hand, not only will the population grow, but also and more importantly, the gradual rise in living standards will make car ownership affordable for tens of millions of inhabitants. According the Observatoire Cetelem de l'automobile 2015, the Chinese market is likely to register 30 millions of new cars in 2020, which represents a third of world forecasts for that date. In China and India, there are currently fewer than 100 cars per 1,000 inhabitants, whereas in France or the United States this figure is over 400 per 1,000.

Moreover, the emerging countries' inclination for electric vehicles is galvanized by their critical need to adapt to climate change and fight against the now worrying levels of air pollution. In addition, even if their current energy mixes – especially electricity generation – are high-carbon, these are expected to develop rapidly, with each electric vehicle becoming greener and greener, unlike the conventional combustion-powered vehicles.

China, India: gigantic State ambitions

The Chinese and Indian settings are thus fertile ground for an intensive mainstreaming of electric mobility. Only a few milestones still need to be passed before they become influential launch pads for the rest of the world.

The first crucial step is the involvement of public authorities, which supposes mobilizing various tools, starting with energy, charging, and storage infrastructure. Added to this come the incentives not only for citizens, but also private and industrial investors.

On this count, the central governments of China and India, as well as the political leaders of their provinces and states have made clear commitments. Beijing is thus targeting ownership of 5 million "green" vehicles by 2020. To attain this, purchase incentives ranging from 3,500 to 7,800 euros (most often double in the regions) are offered on condition that the purchase is for a homegrown brand. Also, some administrations receive subsidies providing that 50% of their public vehicle fleets are electric vehicles. There is also a co-financing scheme for a network of fast-charging piles covering over 32,000 km of highways by 2020. Added to this is the "social" incentive whereby drivers of electric or hybrid vehicles can avoid the "odd-even" alternate day ban during high-pollution episodes.

In India, the State's policy is equally ambitious. After setting a goal of 100 GW of solar power by 2022, the country has recently announced its ambition to reach 100% electric vehicle sales by 2030. As early as 2016, public authorities hope to see some 800,000 bikes, scooters and other electric cars on the road, and for 2020, 6 million battery-powered vehicles. "India can become the first major country where every car on its roads is electric," declared Piyush Goyal, Minister of Energy, last March. A raft of ambitious objectives has been coupled with hundreds of experiments notably centered on smart cities.

The automakers are adapting fast

Another necessary step to expanding electric mobility in these countries is the commitment of national and international automakers, which must not fall short. This is crucial for innovation and the commercialization of affordable, high-efficiency vehicles and the Chinese and Indian industrial ecosystems for electric vehicles have plenty of dynamism.

In China, the electro-mobility market is dominated by homegrown brands, the leader being BYD with its portfolio of electric buses and electric or plug-in passenger cars. The automaker sold 58,000 electric vehicles in 2015 and is counting on sales of 150,000 for this year. Other already established groups are close on its heels. For example, Chery with its QQ model, which is the most affordable on today's market and the best-selling model in China. BAIC and Geely are just behind. Geely, with its "Blue Geely Initiative", has announced that by the end of the decade 90% of its production will be either hybrids (65%), or all-electrics (35%). It also promises to sell its plug-in hybrids at a similar price to its conventional combustion-powered vehicles. As Chinese brands are given preference, foreign automakers have found a way to break into the Chinese market by partnering with the local industry. Nissan has set up a joint venture with Donfeng and now produces its Leaf model in China, sold locally under the name Venucia. Renault, with the same partner, will industrialize its Fluence there in 2017.

In India, the two national majors Tata and Mahindra (via its subsidiary Reva) have been selling electric vehicles since the early 2010s. Foreign manufacturers are also in the picture, particularly Hyundai, which holds fourth place in terms of automobile sales in India and is now planning to partly manufacture its electric i10 there.

In addition to the presence of national and international automakers in the electric and hybrid market niches, recent announcements of high-performance models have particularly caught our attention. Chery has set up a joint venture with the Japanese Yaskawa Electric in order to produce motors and control systems for electric vehicles in the city of Wuhu, in eastern China, with a goal to produce better and more. High efficiency is also targeted by Tata Motors, which has ordered a battery assembly pilot line for its Pune factory. Another important signal comes from the Renault-Nissan alliance. Present in China and more recently in India with its low-cost Kwid model, the French group wants to go even further. "We need to work on an affordable zero-emission vehicle, as pricewise our current electric vehicle offering is centered on developed markets, but not emerging markets," declared CEO Carlos Ghosn. As early as 2014, with the partnership agreement with Mitsubishi, the two industrialists were already planning to market an electric city car priced at less than 11,000 euros (before subsidies) by 2017. Today all the signs point to a model that will be an adaptation of the Kwid.

The partnerships formed by the various automakers show they can adapt to emerging market requirements. Cost is a prime factor, but there is certainly a need to go further and develop new services for electric vehicles if users are to be lastingly convinced. Battery guarantees and recycling, charger socket interoperability, innovative instruments for vehicle autonomy... all the assurances that drivers in emerging countries, even first-time buyers, are expecting, as are European or North American drivers.

PERSPECTIVE ON ... Electric Mobility

Press Review



China: an unexpected decline in exports and slump in imports

In April, China's exports fell unexpectedly and its imports decreased. This is a new sign of weakness from the planet's largest trading power. http://rfi.my/1s5RvWQ



China has long followed a transformative strategy to transition from export-based production to production for the domestic market. This time, the government is stepping up the pressure.

Transforming agricultural resources in Africa: a declared priority

Mohamed Ould Tolba, "principal agro-economist" at the African Development Bank (AfDB), explains that countries with agricultural resources should transform them locally in Africa before exporting them. http://buff.ly/1TvN6Cv

THE BRIDGE TANK TAKE

Yes, by linking up technologies, financing, intangible capital, and associated sectors. To this end, Morocco is launching the "triple A" initiative: Adaptation, Agriculture, Africa. Transform, yes, but sustainably.

Tweet of Jayant Sinha @jayantsinha

Days of crony capitalism in India are gone! We are bri nging in an age of entrepreneurial capitalism. #TransformingIndia

THE BRIDGE TANK TAKE

Crony capitalism goes down "relatively". It isn't shrinking. Worldwide, it's even rocketing. So, relatively, it may not be down

FOCUS ON... Rwanda

Pointers to Emerging Trends

Rwanda's digital economy

Rwanda, Africa's third most competitive economy according to the World Economic Forum, and host to Davos Africa, 11–13 May, never ceases to amaze. Twenty years on from the genocide that scarred this East African State, Rwanda's growth rate is now up among the world's top 20, and highly commended by the IMF and the World Bank. The country's political and financial choices aim to embed ICT into its economy are certainly in line with this dynamic.

"The Internet is a basic necessity, like water and electricity". This statement from Rwandan President Paul Kagame in 2014 epitomizes the country's determination to digitize its economy. Since 2000, Rwanda has identified ICT as an excellent opportunity to propel its economic and social growth, integrating this as a crosscutting theme in its Vision 2020 strategy. The goal is to transform a low-income economy based on agriculture into a service economy based on information and knowledge, and attain middle-income country status.

The Rwandan Government has begun by installing a national network of fiber optic interconnections linking the country to international submarine cables. Mobile phone and Internet use have exploded, though still limited to part of the population. Between 2005 and 2015, the percentage of Internet users rose from 0.5% to over 11% of the population, and the mobile phone subscription rate increased from 2% to over 65%. This success has been further amplified with the launch of the country's first 4G network in November 2014.

For Rwanda, political and financial investment in digitizing communications and information is a major development lever. As Jean-Philbert Nsengimana, Minister of Youth and ICT, confirmed in early 2015 that the extension of the Internet must enable new jobs and services to be created nationally, starting with the public service sector. In 2014, the company RwandaOnline was mandated by the government to digitize nearly 400 public services by 2020 via the setting-up of Irembo, an e-government service.

Mobile payment systems are also becoming more widespread. As a result, Rwanda hopes to drive new segments of the economy, such as e-commerce, but also smart energy and smart urban planning – a key challenge.

In the societal sphere, 4G should provide Rwandans with better access to knowledge through e-learning, and to healthcare through e-health, particularly in remote and poorly served areas. Here, buses are fitted out as mobile telecenters that provide practical, affordable services, and training is provided for farmers, tradespeople, students, women, youth groups, entrepreneurs and other rural inhabitants.

A "smart and prosperous" Rwanda in sight?

The rapid take-up of mobile and digital technologies has opened the door to a new generation of entrepreneurs. In 2012, the first public-private incubator, K-Lab, was set up in Kigali. Since then, about ten others have opened. Major US universities are also involved in

FOCUS ON... Rwanda

Pointers to Emerging Trends

Rwanda's digital drive. Moreover, in the near future, the government is set to launch an investment fund of over 100 million dollars to finance the most innovative projects proposed by start-ups.

«"Necessity is the mother of innovation. Rwanda is a landlocked, densely populated and resource-poor country. Our needs are continually increasing, which forces us to constantly innovate to do more with less. We certainly don't have much in the way of natural resources, but at least we have technology, and we are building our economy on this ecosystem», Jean-Philbert Nsengimana explained in an interview with Le Monde last November. He also added: «We want to become a leading technology hub in Africa».

Un leadership que le Rwanda semble bien prendre, en Afrique sub-saharienne au moins. Déjà très décisif dans la création de la Smart Africa alliance en 2013 (dédiée à la réduction de la fracture numérique des 9 pays membres), il a accueilli du 11 au 13 mai la 26e réunion sur l'Afrique du WEF, sur le thème: « Relier les ressources de l'Afrique à travers la transformation numérique ».

Rwanda certainly seems to have taken on this leadership role, at least in Sub-Saharan Africa. It has moved very decisively on the creation of the Smart Africa Alliance in 2013 (focused on reducing the digital divide in the 9 member countries) and the hosting of the 26th World Economic Forum on Africa from 11 to 13 May, on the theme: "Connecting Africa's Resources through Digital Transformation."

Rwanda's real ownership of the digital challenge will, however, need to show results in economic and social terms, given that deploying digital technologies does not in itself generate inclusive development, as the World Bank underlined in its World Development Report 2016: Digital Dividends. The report's introduction points out that "digital technologies have spread rapidly in much of the world. Digital dividends—the broader development benefits from using these technologies—have lagged behind, but greater digital adoption will not be enough. To take a full advantage of the digital revolution, countries also need to work on the 'analog complements'—by strengthening regulations that ensure competition among businesses, by adapting workers' skills to the demands of the new economy, and by ensuring that institutions are accountable."

In Rwanda, it is now necessary to ramp-up the rate of Internet penetration and also, to a lesser extent, mobile telephony. Most importantly, the country needs to ensure that this benefits everyone, particularly the economic actors. Certainly, the above examples indicate a strong momentum in this direction. What is needed is to breathe life into this dynamic and let it permeate all segments of society.



Towards a new energy deal for Africa?

From 23 to 27 May, the African Development Bank (AfDB) holds its annual meetings on the themes of energy and climate change. The 4,500 decision makers gathering in Lusaka, Zambia, are called to revisit the resolutions taken at COP21 and the issues to be raised at COP22 in Marrakech.

AfDB has already begun to take action to provide Africa with green pro-growth and low-carbon electrification, by unveiling its "New Deal on Energy for Africa" in September 2015. This initiative aims to ensure universal access to energy services in Africa by 2025.

"As the African proverb says: 'If you want to go fast, go alone. If you want to go far, go together!' Hence, the African Development Bank is working with governments, the private sector and bilateral and multilateral agencies to develop a Transformative Partnership on Energy for Africa," said AfDB's president, Akinwumi Adesina, at the Davos Forum in January 2016.

Note that AfDB estimates Africa's energy sector financing requirements at 55 billion dollars a year.

Towards a more prodcutive and inclsuive world



The OECD Week 2016 explores and debates about the issues of innovation, digital economy and international cooperation to improve fostering policies for more productive and inclusive societies.

Nowadays the question of redefining partnerships to improve inclusive growth is an important topic that the OECD forum highlighted to enhance local and regional initiatives which shape this reconfiguration. Thus, the region of Latin America and the Caribbean was honored in a whole panel this year as a result of a stronger partnership between the region and the OECD since January 2016.

We recall that, Brazil, Chile and Mexico are already members of the OECD, while the membership of Colombia and Costa Rica is pending.

News and Events

The Bridge Tank Voice

The Bridge Tank in the media

« "...the creation of a European sovereign fund, as other of the world's large States have done. This fund will be earmarked for financing environmental transition and strategic infrastructure investment, and will give Europe the substantial financial leverage that is crucial now that estimates foresee a 300 billion euro shortfall for investment in Europe by 2020." Study "Le capital patient – un horizon pour la France et pour l'Europe». Etude « Le capital patient – un horizon pour la France et pour l'Europe. » Study "Le capital patient – un horizon pour la France et pour l'Europe" (Patient capital – a horizon for France and Europe), by Abdeldjellil Bouzidi, Thomas Chalumeau, Camille E., David P., Joël Ruet, 11/05/2016, Terra Nova.

http://tnova.fr/etudes/le-capital-patient-un-horizon-pour-la-france-et-pour-l-europe



Release of the collective work: Chine, Inde: les firmes au coeur de l'émergence (China, India: the Firms at the Heart of Emergence)

«Rather than by relocating entire production lines, emerging economies are integrating the global economy by making components and performing specific functions in a long global production chain. In this global Fordism, China is the planet's great assembler but nearly three-quarters of this assembly function (55% of China's exports) is controlled by Asian and Western foreign capital. The vast majority of Chinese private businesses are still "OS firms" dealing with products that certainly involve higher levels of technology, but with low value-added. Apart from this assembly function – at least, for the moment –, India seems to have a low profile in the international economy. Yet many of its large groups are coming to the fore globally»

Excerpt from the book <u>Chine, Inde</u>: <u>les firmes au cœur de l'émergence</u>, under the direction of Jean-François Huchet, Xavier Richet and Joël Ruet, Editions Presses Universitaires de Rennes, €13

THE BRIDGE TANK TOUR

27 may Casablanca, Morocco: Joël Ruet spoke at the session "Morocco, the catalyst of the African Brand" in the conference "Country Marketing: Morocco's Brand Modeling" organized by the Amadeus Institute at the Four Season hotel in Casablanca.

1st et 2nd june, Tanzania, Dar es Salam : OBJECTIF AGENDA 2030 ET AGENDA 2063 :L'ÉTAT DE DROIT, MOTEUR DU DÉVELOPPEMENT DURABLE DE L'AFRIQUE, Conférence organisée par l'Organisation internationale de droit du développement (OIDD), en coopération avec le gouvernement de la République unie de Tanzanie