



## *Who's next? Selling off German technologies in the electromobility sector*

*What do we want the car of the future to look like? This represents a definitive issue where the mobility of our generation is concerned. The potential buyer might well respond: "it should be sustainable, comfortable, automated and innovative, with sophisticated on-board entertainment systems". "Cost-effective and competitive," the manufacturer would be sure to add.*

There is now a steadily increasing awareness in society of the need to develop alternative models to the conventional combustion engine. This "re-think" is being spurred on by government requirements in the context of the German transport transition (*Verkehrswende*), some of which are mandatory. At the beginning of 2018, for the first time, more than roughly 3 million electric vehicles were registered for use worldwide; a healthy increase of 55 % over the previous year. In Germany however, as of the 1<sup>st</sup> of January 2018, a mere 53,861 electric vehicles were recorded as being in use on the roads.

### **Global development**

In global terms, a process of permanent transformation is underway in the field of mobility, bringing with it enormous change for the automobile, energy and utilities and IT sectors, mobility infrastructure per se and for all of the other participating branches of industry. This process of transformation is marked, on one side, by a rash growth in mergers, takeovers and cooperations, particularly between companies within the automobile industry and previously unrelated sectors, and by the dominant economic presence and appetite for investment on the part of China on the other. At an astonishing pace, and spending billions in the process, China is busily buying its way into the global economy, particularly in the

technology sectors and the automobile industry. Efforts in R&D are not only focussed on the manufacturing of more effective electric batteries to power vehicles – there is also a considerable interest on the part of energy providers in the expansion of the charging infrastructure required for electric vehicles and in the 'second life usage' of car batteries that have reached the end of their useful life. In response to this development, there is a marked tendency on the part of manufacturers and parts suppliers towards takeovers and mergers, and increasingly joint ventures are being formed with companies within the energy, IT, technology and telecommunications sectors. Many of these manufacturers and suppliers are participating in start-ups or buying them outright with the aim of swiftly and efficiently acquiring new know-how in areas unrelated to their business and integrating this know-how within their own companies.

Although this growth in M&A activity does imply advantages for many German firms, it also brings with it a marked increase in foreign takeovers of German companies, especially by Chinese investors. This has been repeatedly sparking discussion in the media and in political spheres as to whether Germany is in danger of selling off its technologies, particularly since the Chinese manufacturer of household goods, Midea, took over the Augsburg-based robot manufacturer Kuka back in January 2017.

As a result, many figures within the business world and the political realm have since been calling for tighter protection in relation to investments and the German economy at large. Also at the EU level, there are calls for a more rigorous approach towards foreign investors striving to take over key internal European sectors and future technologies, which bear particular relevance for the employment market, in order to prevent these sectors from migrating to countries outside the EU.

## Specific legal issues

Classic M&A strategies will have to be adapted to bring them up to date with these changes because, up until a few years ago, takeovers and mergers were rare events, and, with companies in unrelated business areas, virtually unheard of.

In dealing with this transformation, which, also in the area of company law, is particularly characterised by new and innovative forms of cooperation with a clear technological focus, the primary focus will be on developing flexible and legally sound articles of association, joint venture agreements, R&D contracts, cooperation agreements, operative supply chain agreements and project agreements. In addition, for instance when a company is considering the acquisition of a target company or a joint venture project, and when acquired IP rights or e.g. licenses are being assessed, relevant requirements under regulatory and supervisory law will need to be identified and complied with from the outset.



Potentially of relevance here for instance could be the statutory regulations relating to the placing of batteries and storage technologies on the market, as this may be associated with obligations in terms of labelling and registering products. Legal activities may also centre around advice on the legally compliant use of state subsidies, also but not exclusively in the context of due diligence.

## Is Germany too slow to develop?

Above all China is dynamically leading the field when it comes to the development, manufacture and use of electric vehicles. As evidenced by the current Electric Vehicle Index (March 2018), maintained by the internationally renowned consultancy firm McKinsey, almost every second electric vehicle worldwide was registered in China in 2017, with over 600,000 being sold there (an increase of 72%). The country has a 41% share in global production and is thus leading the field by a clear margin. With just 18%, Germany, in contrast, only comes in in third place behind Japan with 19%<sup>1</sup>, as the report shows.

The fact that China is in pole position and its dynamic role in the field of electric mobility is due in particular to the diverse range of vehicle models it offers in every class, the fact that the industry benefits from advantages in the form of state support in both financial and general respects, such as e.g. the large-scale subsidisation of automobiles with exclusively electric motors, and China's massive and continuing expansion of its battery charging infrastructure.

It is true that electromobility is also being promoted in Germany by way of a buyer's premium for electric vehicles – the *Umweltbonus* (environmental bonus), by tax advantages and by way of the “*Förderrichtlinie zur Ladeinfrastruktur Elektrofahrzeuge*” (subsidy directive on charging infrastructure for electric vehicles). However, the subsidies are considerably lower than they are in other countries (in China as much as 40% and in Germany just 20%)<sup>2</sup>.

<sup>1</sup> Figures cited from McKinsey:

<https://www.mckinsey.de/branchen/automobil-zulieferer/electric-vehicle-index>

<sup>2</sup> <https://www.mckinsey.de/branchen/automobil-zulieferer/electric-vehicle-index>

In addition, an adequate full-coverage network of charging stations has not yet been provided. The available range of German electric vehicle models is also considerably smaller and manufacturers are relying on Asian exports when it comes to key components, particularly where battery cells are concerned, because Germany and Europe have barely any appreciable production capacity to show for themselves.

Although Germany is inseparably connected with the automobile in terms of its status as a business location, development still seems too slow when it comes to e-mobility, and Germany appears to be playing fast and loose with its future as a centre for technology and automobile production. This not only entails serious consequences for German business and environmental performance but could also mean an adverse impact in terms of macroeconomic and social consequences and represent a threat to job security in the automobile sector and other closely related industries in the country.

## German/Chinese partnerships

However, the major car manufacturers do gradually seem to be waking up to the situation – for instance BMW has just recently sealed a key partnership deal with the Chinese company CATL. The German legacy brand BMW will be purchasing large volumes of battery cells from the Chinese corporation for the production of its electric fleet. In return, CATL will set up a major battery cell manufacturing centre near Erfurt. The current situation in the battery cell market is soon likely to improve considerably for German car manufacturers when the Chinese begin manufacturing these in Thüringen.

## The “joint venture obligation” in China

From the other perspective, in economic terms, it is essential that non-Chinese car manufacturers also gain a foothold in the Chinese market with their own electric vehicle models, as China is currently the fastest growing market worldwide in terms of products sold there.

However, this is associated with a number of challenges and risks where investments and transactions are concerned because, in principle, an obligation to enter into joint ventures still widely applies to investments in China. This means that foreign companies aiming to get a foot in the door in the Chinese market must cooperate closely with domestic companies and must even be affiliated to them under company law. This obligation to enter into partnerships has only ceased to apply very recently in relation to the manufacture of electric vehicles. However, the traditional automobile sector will have to wait a little while longer to be exempted from the obligation. Thus the restriction on foreign participation should cease to apply in 2020 for companies producing commercial vehicles and in 2022 for car manufacturing companies. The restriction to two joint venture partners is also due to be lifted, so that, after a five year grace period, all participation restrictions will cease to apply.

This state-prescribed cooperation did seem, to begin with, to also be disadvantageous for the electric vehicles sector, as regulations of this nature generally tend to slow down the progress of transactions and usually have an inhibiting effect on negotiations and on the willingness to invest in the first place. The major cultural differences inherent in the legal systems and the various differences in terms of statutory regulations also represent hurdles. In addition, the potential siphoning off of German know-how by the Chinese partners represents a significant problem or at least a frequently identified risk.



However, foreign companies do also benefit from the in-depth knowledge of the national market that their Chinese partners provide, and they gain access to distribution channels and to relationships within governmental and economic spheres which could never be established by a western manufacturer in the same way because of the considerable cultural differences at play. This means that governmental and economic barriers to market entry are easier to overcome. A further advantage consists in the great open-mindedness of the Chinese culture towards digital transformation, which allows German joint venture partners to test and use new technologies faster and more extensively, but ultimately also sell these.

In so far as it's permissible to draw a general conclusion here, on balance, the advantages do largely appear to outweigh even those disadvantages associated with the joint venture obligation as it has applied until now.

## Investment controls

A further noticeable phenomenon within the automobile sector consists in the outbound M&A activities in which Chinese investors are engaged. A number of Chinese automotive suppliers are striving to acquire knowledge and technology by way of acquisitions abroad, particularly in Germany, in order to raise vehicle construction standards to match those in the West, and to acquire key components such as for instance batteries, engine controls, drive units and vehicle electronics.

In 2017, China was the fourth largest investor in Germany after the USA, Switzerland and Great Britain. A veritable "selling off" of German technology has been ongoing since 2016. In view of the associated threat of domestic know-how migrating abroad, people are increasingly viewing this development critically and calling for stronger protection for the German economy, also in the electric vehicles sector. One example of this kind of economic protectionism is provided by the USA, where a federal authority monitors whether or not investment in the country is permitted. Since the 1970s, the Committee on Foreign Investment in the United States (CFIUS) has been deciding whether foreign investments are in line with American interests in terms of security policy.

However, takeovers of German companies by foreign investors too are not entirely beyond the reach of state control. In Germany, investment controls are provided for in the *Außenwirtschaftsgesetz* (Foreign Trade and Payments Law) and in the *Außenwirtschaftsverordnung* (Foreign Trade and Payment Regulation), albeit with a number of potential reservations in view of the possible associated encroachment upon the contractual freedom of the parties to a contract. These regulations apply to the acquisition of companies, i.e. to takeovers and participations, whilst start-ups, also in the form of joint ventures, are not covered by them. Nevertheless, the barriers in terms of a prohibition being issued by the *Bundeswirtschaftsministerium* (Federal Ministry for Economic Affairs) are fairly high. Firstly, after the transaction, the acquiring party must obtain 25% of the voting rights directly or indirectly, and the acquisition must either represent a threat to public order and security or to essential security interests of the Federal Republic of Germany.

This could apply if the target firm in the context of a company purchase operates what is referred to as critical infrastructure or develops software which is used to operate critical infrastructures and relates to the energy, information technology and telecommunications, transport and traffic, health, water, food or finance and insurance sectors. However, whether or not, for instance, also in view of the macroeconomic impact of the promotion of electromobility, the authorities will (in future) deem the charging infrastructure for electric vehicles to be critical infrastructure facilities within the meaning of the legislator or the *Bundeswirtschaftsministerium* is highly questionable.

## How are the regulations being applied?

To date no acquisitions have been prohibited by the state, although over recent months there does appear to have been a marked change in terms of how the regulatory mechanism is being applied in connection with investment controls.

Germany has recently been showing increased resistance to Chinese participations and takeover plans. The *Bundeskabinett* (German Federal Cabinet) had for instance intended to reach a decision at the beginning of August 2018 in a case involving the Westphalian mechanical engineering company Leifeld. The company supplies parts to the

automobile and aviation sector, and the Chinese group Yantai Taihai Corp has shown a keen interest in participating in it along with the French Manoir Group. At that point in time, it would have represented the first instance of the application of the new *Außenwirtschaftsverordnung* in Germany but the transaction was called off before a decision was reached in the case.

Yet Germany's protectionist efforts can nevertheless be clearly felt. In a current case involving the electricity grid operator 50Hertz, the situation has proven to be more complex, as the *Außenwirtschaftsverordnung* could not be applied directly. The state-owned Chinese corporate group State Grid Corporation (SGCC) had already repeatedly shown interest in the German utilities company and made an offer to take shares in it. According to information published in the *Handelsblatt*, a purchase agreement had already been concluded with the Australian fund manager IFM, which is obtaining 20% of the shares in 50Hertz. However, the Belgian energy supplier Elia, which holds the remaining 80% of the German electricity provider, was entitled to a right of first refusal in relation to the Australian shares.

The participation of the Chinese investors in this case was therefore not subject to scrutiny under the *Außenwirtschaftsverordnung* even though what was concerned here certainly was security-relevant infrastructure in relation to energy supply, because the share that was up for sale amounted to less than 25%. As the only way of preventing Chinese participation was by exercising the right of refusal on the part of the Belgian energy supplier, Berlin evidently opted for a different approach.

The German Federal Government reached an understanding with Elia with respect to the sale and arranged to have the *Kreditanstalt für Wiederaufbau* (KfW, a German state-owned development bank) acquire the share for sale in 50Hertz on its behalf as a bridging solution. This means that Elia will completely take over 50Hertz by way of the right of first refusal and will then hand over a 20 percent share to the KfW bank. The Chinese investor will end up empty handed.

## Protecting the German economy

There is no way of knowing for sure yet what kind of shape the ministry's practise will take when it comes to issuing decisions and scrutinising transactions. However it does already seem clear now that Chinese investments will be subject to

greater scrutiny in future, and possibly also more decisively prohibited. The number of inspection proceedings is at least permanently on the increase. And there are plans for stricter investment controls, both at the national and at the European level.

One of the goals of the German coalition agreement is to better protect security-relevant key technologies from being sold or taken over. At the beginning of June last year, the European Parliament's Trade Committee also voted in favour of tighter scrutiny. What will play a key role here is whether, directly or indirectly, a state is actually behind an investor and is exercising its control through it as a medium. Depending on the nature of the regulations, this could result in a greater barrier for Chinese investors.

## Legal challenges

As comprehensive state-initiated protection of the German economy against foreign buy-outs is not yet fully in place, the focus of all efforts lies for now and in the near future on increasingly finding ways to legally safeguard German interests in order to prevent the unjustified migration of electromobility know-how and technology abroad, even if prosecuting violations and asserting claims e.g. in China may prove challenging if experience to date is anything to go by.

Playing a major role here is above all industrial property protection at both the national and international level, wherein the focus in legal terms lies in providing advice on the conclusion of contracts relating to R&D and projects, and on license agreements.

By the same token of course, in connection with the development of novel products and methods in the area of electromobility, the increasing density of third party patents must also be taken into account. Particularly in situations involving cooperation with other companies, transparent provisions are needed when it comes to the handling of the results of any work and the later use of these, as there is a vital interest in asserting any arising protective rights against plagiarists, where applicable also independently of the respective cooperation partner.

A further legal challenge here lies in the need to observe antitrust law and official regulations at the national and international level. In the case of Chinese investments in Germany, it is recommendable that both sides, the German seller

and the Chinese buyer, factor investment controls in both countries into their transaction planning early on, both with regard to timing and to regulatory content. This applies particularly to situations in which companies are being sold under considerable time pressure, for example in the case of public takeovers or structured sales processes with very tight deadlines. However, in any other transaction too, the parties should address this aspect at an early stage.

Investment controls should also be accounted for in the company purchase agreement in the form of closing conditions, and procedural processes such as for instance the obtaining of potentially necessary permits or approval, or also certificates of non-objection in accordance with the *Außenwirtschaftsverordnung* (Foreign Trade and Payments Ordinance) should also be reflected in the contract. In addition, the purchase agreement should also include provisions on how to proceed if permission for a transaction has been denied or approval has not been obtained by a certain agreed point in time. This provides greater legal certainty for both sides, and lends the transaction process a degree of discipline.

Attained know-how should be protected by way of precise written documentation and by the legal safeguarding and actual securing within the respective company of its own research results and the trademarks, patents and copyrights arising therefrom. It is, for instance, possible to prevent the undesired migration of key electromobility technologies representing the intellectual core value of a company by discontinuing the production of certain parts in China.

One alternative is to pursue diversification strategies, wherein the production of individual electric vehicle components is split between various different Chinese suppliers. Knowledge, documents,

samples and models should be passed on exclusively on a ‘need to know’ basis. In addition, stringent provisions should be established in relation to secrecy obligations.

## Advantages of cooperating with China

Although it is the case that a number of strict legal requirements and other effective regulations do need to be observed in order to prevent the migration of key company know-how to China and other countries abroad in general, in the electromobility sector in particular, China should by no means be seen as an opponent but rather as a partner, as the “Middle Kingdom” is making a considerable contribution to development in the field of electromobility, and is helping foreign countries to gain access to the Chinese market, in which more than 50% of turnover in the sector is already being generated. China is already very clearly leading the field when it comes to the development, manufacture and use of electric vehicles, and also represents a reliable, solution-oriented and innovative cooperation partner for German companies.

Anyone keen to know what the car of the future is going to look like will have to look to China.

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