VDMA Fit for 55 Position Paper

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The Fit for 55 Package presented by the European Commission in July lays out the concrete steps towards achieving the EU's new climate targets and if implemented cohesively will present a coherent framework which enables planning and investment security for the decade to come. VDMA very much welcomes the objective to create concrete steps towards achieving the overarching climate goals at EU level. The mechanical engineering sector is the enabler of a positive climate and energy future. The Green Deal and Fit for 55 Package can provide significant business opportunities for our industry whilst also contributing towards the EU reach its emissions reduction goals. Mechanical engineering companies offer green solutions for every conceivable technology path. A recent study has shown that the technologies developed by our industry could enable almost 90 percent less greenhouse gas emissions in industrial applications. Our companies are driven innovators which supply several climate-friendly technologies such as among many others, energy efficiency technologies, wind turbines, power-to-x, to name a few.

The VDMA represents more than 3,400 member companies of the medium-sized mechanical and plant engineering industry in Germany and Europe. With an export quota of around 80%, mechanical engineering is one of the major supporters of free trade but also an expert on global markets. What is now needed are market-based incentives which ensure that older, more polluting technologies within the EU are rapidly replaced by climate friendly solutions.

Universal CO_2 pricing mechanisms, such as the review of the energy taxation directive, are a cornerstone in reaching the climate targets. Member state support for the taxation review is crucial for its successful implementation. However, representing mostly smaller companies, VDMA is concerned that certain measures, such as the introduction of a Carbon Border Adjustment Mechanism might create a high bureaucratic burden as well as higher material costs which would disadvantage competitivity on the global market. This could lead to trade retaliation measures with serious consequences for the EU exporting industry sectors such as the mechanical engineering industry. This paper would like to highlight some key policy measures under the fit for 55 package which will enable the transition to a climate neutral EU, whilst also highlight some areas which will in our view hinder the desired transition from both an economic and climate perspective.

Energy Taxation Directive

The mechanical engineering sector welcomes the revision of the energy taxation directive (ETD). The reform of the ETD is long overdue and creates the biggest lever to establish price parity between climate-neutral and fossil fuels. The existing tax regime does not fit the upcoming challenge to transform to climate neutrality. The VDMA has long advocated effective and predictable CO_2 pricing. By pricing GHG emissions of fossil energy carriers across all sectors an EU-wide CO_2 price incentive will be set, encouraging investments in efficient and climate friendly technologies. We therefore support the change of taxation from energy volumes to the environmental impact of energy sources.

- It is important to create a level playing field across the EU. Since Germany already taxes well above the previous minimum tax rates, price effects are expected as a result of this review. It will be good to have all of the EU member states on a similar pricing level for competitive reasons.

- However, the mechanical engineering sector is a sector with a high export rate. Currently international competitiveness is guaranteed in the manufacturing industry through special tax rates. The EU energy taxation directive should allow member states which tax well above the minimum tax rates to offer tax relief for the industrial use of energy products and electricity in manufacturing processes in order to ensure global competitiveness on the global market.

- According to the directive, member states “may apply” exemptions or reductions to renewable energy sources but otherwise it seems they would be subject to the minimum tax rate. There should be no minimum tax rates on renewables. Here we see a clear conflict between the environmental goal and the revenue goal. This will become more and more acute in the future, the more successful CO_2 saving becomes! (Article 16)

- **Without these changes, it will not be possible to make RFNBOs competitive with fossil fuels.** As renewable fuels such as RFNBOs will still be significantly more expensive than fossil fuels in the market ramp-up phase, we support the tax exemption for aviation and shipping use (**Articles 14 and 15**). This should be implemented by all member states and become mandatory.

- **The 10-year minimum tax rate of zero for renewable fuels (e.g. RFNBOs) must apply to all transport sectors and become mandatory.** Just as RFNBOs are needed for aviation and shipping, they are also needed in road transport for the defossilisation of the legacy fleet. As road transport is already subject to a minimum tax of 9,09-12,83€/GJ under the current ETD, a mandatory tax rate of zero of at least 10 years for road transport would have an immediate effect on shrinking the price gap with fossil fuels. Furthermore, as value chains overlap: the RFNBO refinery processes produce different chemical fractions, which can then be used to produce fuels for aviation and shipping as well as for road transport. Hence, RFNBOs in the different transport modes do not compete but can complement each other.

Carbon Border Adjustment Mechanism

The Carbon Border Adjustment Mechanism (CBAM) proposal fulfils the EU’s desire to be a global climate forerunner whilst also aiming to keep certain industry sectors competitive. The proposal for a CO_2 cap mechanism is based on the EU's plan to incentivise industry in third countries to take climate action and create a level playing field for certain raw material industry sectors within the EU. The current CBAM design however increases the cost of manufacturing in Europe further down the value chain. Higher production costs due to an increase in raw material and primary goods prices mean a loss of competitiveness for mechanical engineering companies producing within the EU. EU complex products are in direct competition with non-EU complex goods from third countries and have with higher production costs a high likelihood to be no longer competitive neither within the EU single market nor as exports at global market. Our industry sector has up to an 80% export quota. It is unclear how with the CBAM international competitiveness of EU manufacturing and exports of goods manufactures shall be ensured.

Mechanical engineering companies see a high risk of carbon leakage for export-oriented industry sectors further down the value chain, both in terms of competitive prices on the

global market and in terms of bureaucratic costs. Currently, investment uncertainty and ever-changing framework conditions for the mechanical engineering sector represent a high carbon leakage factor. Companies, when looking to invest now, might look outside of the EU. For this reason, VDMA sees a Carbon Border Adjustment Mechanism as a potential further pressure on our industry. The mechanism must not lead to a higher burden on the export-oriented European mechanical engineering sector.

Climate goals must remain the focus of EU globally oriented mechanisms. The WTO conformity of the current proposal is highly questionable, as is the Commission's desire to incentivise global emissions reductions with the CBAM, especially as the revenues flow into the EU's general budget and are not used for climate protection measures. With this in mind, the CBAM must not disadvantage strong European industry sectors which offer climate solutions under the guise of incentivising global climate action.

VDMA supports the complementary or in a best-case alternative concept of a Climate Club of front runners with a comparable level of ambitions and therewith similar transition burden. Our industry urges the EU to work for such a free trade group to ensure efficient and fast transition toward climate neutral economies.

VDMA calls for the following points to be included in the upcoming negotiations on the carbon border adjustment mechanism:

- **WTO compatibility must be proven by the EU institutions before implementation** of the CBAM. Whilst the European Commission has expressed its belief that the CBAM proposal is WTO conform many third countries and WTO members, such as the US, China, India, Brazil, and South Africa have already expressed scepticism at the CBAM proposal, viewing it as a protectionist measure. This could lead to trade retaliation measures with serious consequences for the EU exporting industry sectors such as the mechanical engineering industry. The use of CBAM income towards the general budget does not without equivocation fulfil the criteria of an environmental measure under WTO law and VDMA therefore highly doubts the WTO compatibility of this aspect of the proposal. VDMA understands that the European Commission seeks to create a level playing field for those sectors that are subject to the ETS. However, as held above without measures that support EU manufacturing the CBAM will merely burden the competitiveness of EU manufacturing.

- **A thorough impact assessment of CBAM for our downstream industries producing in the EU** including the higher cost burden for EU exporting industries. Some VDMA members will be affected by the higher import costs of raw materials. As companies which export a large proportion of their products, they will be less competitive on the global market and there will be a higher risk of carbon leakage. Currently all technology solutions to climate change are needed globally. If European mechanical engineering companies cannot competitively export outside of the EU this will hinder technological transfer to developing countries as supported by the Paris Agreement

- **Extending the scope of the CBAM should not be left to delegated acts**. Under the current draft the Commission has the power to decide by delegated or implementing acts on significant matters (e.g. expanding the list of exempted countries, recognising third

country systems for carbon pricing, default values and enlarging the scope to include slightly modified products). As the Commission has expressed the intention to extend the scope in the future to other sectors, VDMA believes this must not be carried out via a delegated act process but rather take place in a transparent and democratic process involving all the EU institutions. In case of an extension of the CBAM to other sectors, particular care should be taken to avoid distortions of competition between sectors covered by the CBAM and those not covered (especially if they produce the same products).

- **A CBAM as it is currently designed must not be introduced unilaterally – this would limit the possibilities for climate technology solutions offered by European companies to be implemented globally.** The EU needs to set framework conditions which allow for stability and investment for a time spam of minimum 10-15 years. VDMA is concerned that if a CBAM is introduced now and extended at a later date, investments in the mechanical engineering sector could move out of the EU. A global climate club of like-minded countries should be supported. This would prevent climate tariffs by setting common ambition levels and avoid setting off a spiral of protectionism.

- **The EU can only reach its climate goals if the most polluting industries decarbonise**. The focus should be placed on incentivising and helping hard-to abate industry sectors to decarbonise. With this in mind, it should be properly analysed how to protect these industries effectively from undue competition while setting the correct incentives for switching to clean technologies. Our industries offer climate neutral technology solutions but currently these are not always competitive when industry sectors are allowed to continue producing with older, more polluting technologies and have little market incentive to invest in clean technologies.

- **A Carbon Border Adjustment Mechanism must support developing countries to make the transition.** They are dependent on exports to the EU but cannot manage the transition to "climate-friendly" production on their own.

Energy Efficiency Directive Review

Energy efficiency is very important for the mechanical engineering sector. The sector offers energy efficient solutions for a range of industrial appliances and has invested in energy efficiency solutions in its own production. VDMA supports raising energy efficiency ambitions across the EU. The objective should be an economically efficient integrated energy system. Energy efficiency is an essential prerequisite for the successful transformation of energy systems and the achievement of climate targets - both nationally and internationally. There is considerable potential for energy savings both in electricity and heat generation and in the consumption sectors of industry, transport and buildings. Investments in efficiency technologies are essential. Which technologies will ultimately prevail, must be left to the forces of the market. However, the market must be designed in such a way that the price reflects system effects, such as externalities coming from additional CO_2-emissions. Energy efficiency is one criterion, but not the only one for assessing the suitability of technologies. In a resilient and secure energy system, other criteria also play a role such as system costs, social acceptance and security of supply.

VDMA believes several points should be taken into consideration for a holistic and successful review of the Energy Efficiency Directive:

- The energy efficiency directive must also take entire lifecycle into assessment. Reliability is key. If machine parts are not reliable and do not have a long lifespan then the savings gained via efficiency will be lost in part production and replacement.

- **CO_2 pricing should introduce market incentives for energy efficiency**. Many efficient solutions that are needed are ready for industrial scale, but they do not pay off economically yet. To give an example: Fossil gas and fuels are much cheaper than energy carriers produced by P2X. VDMA therefore believes the review of the energy taxation directive and its alignment with fossil fuel content of energy carriers is key to reaching the EU's climate targets.

- The "energy efficiency first" principle should consider entire system efficiency and climate neutrality from energy carrier to end use application. The review of the Energy Efficiency Directive should help to better coordinate the energy efficiency approach at EU level. Maintaining consistency across the overall system efficiency framework is key. A new energy system based on renewable energy must ensure security of supply and internationally competitive prices. Existing infrastructure and its benefits also need to be taken into account. The EED should therefore reflect "System efficiency" rather than "energy efficiency".

- The energy efficiency first principle should not be applied to individual investment decisions, at least as an exclusive criterion, especially if they concern longer-term investment. In the future, energy will be converted multiple times to increase system efficiency (Article 3).

- Changing the basis of energy audits from company size to energy consumption sends the right signal. VDMA supports this alteration within the directive. However, it should be taken into consideration that the market for energy audit providers is tight. For providers it will become difficult to provide services if certain restrictions are introduced, e.g. minimum number of consultants per office. This will have a knock-on effect on companies as the market for auditors becomes smaller and waiting times and costs increase. A solution should be considered in the framework of the EED.

- Cogeneration remains a solution that should be promoted, including through facilitated grid connection processes. The threshold should therefore not be lowered (recital 37, link to article 24.4a). It is a solution that makes sense in both smaller and larger installations. Larger plans, used in district heating networks that integrate different heat sources, are one of the most efficient solutions to decarbonize heating and cooling. District heating and cooling systems using green cogeneration (powered by green gases) is an efficient solution to decarbonise the heating sector and should be promoted (Article 24).

CO_2 emissions for cars and vans – revision of performance standards

The EU's climate targets are the most ambitious in the world. To achieve the 2030 and 2050 objectives, all possible technological solutions must be used – this includes electric mobility as well as eFuels and hydrogen. Electric mobility is rightly picking up momentum, but even with a very ambitious ramp up of electric mobility, two thirds of the vehicles on the road in 2030 will still rely on the ICE as fleet renewal takes time. If policymakers commit the transport sector to the world's most ambitious climate targets, they must also create the

conditions for meeting them. Only then can the targets be achieved, only then can the market ramp-up of these new technologies take place as early and dynamically as possible.

Stricter fleet limits also require a careful impact assessment regarding the social economic impacts – especially for many small and medium-sized suppliers. The study "Drive Systems in Transformation"[1] has already determined a loss of 160,000 jobs in the powertrain value chain for an assumed end of the internal combustion engine in Europe in 2040. The current proposal shortens the transformation period to 2035 thus putting in danger an even higher number of jobs. The de facto ban on vehicles with internal combustion engines from 2035 onwards by imposing a strict fleet limit of 0 grams CO_2/t for passenger cars and a lack of technology openness in regulation would also apply to PHEVs, an important bridging technology in the transformation phase.

There is no competition for the use of RFNBOs between transport modes due to the different needs and types of fuels and the occurrence of by-products in the production processes. On the contrary, as value chains are overlapping, scaling up the RFNBO-value chain by using the high ability to pay from the transport sector, contributes to decrease the costs of the technology.

We therefore support a technology-open implementation of the fleet regulation, which includes **a voluntary crediting mechanism of CO_2-neutral fuels** to create more flexibility without lowering the ambition level with the following features:

- The mechanism is voluntary – OEMs can choose whether to buy credits from fuel suppliers
- The corresponding emission saving is counted towards their fleet emission
- Fuels suppliers provide additional volumes of eFuels, i.e. volumes that are beyond their own obligation within RED
- The mechanism includes so-called frontloading, i.e. covers the fuels for the whole lifespan of the vehicle. This ensures accelerated and effective GHG emissions reductions (which is the only objective of Fleet Regulation).
- The crediting mechanism must effectively prevent double counting.

A detailed proposal for such a crediting scheme incorporating all these features is on the table, which could be implemented at a limited administrative cost.[2] In sum, such a mechanism would not only put EU regulation on a technology-neutral footing but also enable OEMS to meet their targets even under suboptimal conditions (e.g. high battery cost, delayed charging infrastructure etc.).

[1] https://www.fvv-net.de/fileadmin/user_upload/VDMA_FVA_FVV_Antrieb_im_Wandel_III_Vehicle_Electrification_2040_Whitepaper.pdf

[2] In May 2020, Frontier Economics Ltd. published a study on behalf of the German Federal Ministry for Economic Affairs and Energy (BMWi) where a crediting system for renewable fuels is developed. The study is available online at https://www.bmwi.de/Redaktion/DE/Downloads/C-D/crediting-system-for-renewable-fuels.pdf?__blob=publicationFile&v=4. For more information on the crediting scheme and arguments see Frontier Economics (2021): Crediting System für Low-Carbon available at https://www.efuel-alliance.eu/fileadmin/Downloads/RPT-Frontier-Review_IA_Crediting_System-05-11-2021-stc.pdf.

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