Commissions long-term strategic vision for a modern, competitive and climate neutral economy – “A Clean Planet for All”

VDMA key recommendations for a transition into a low-carbon economy

- position paper -
VDMA supports the **Commissions long-term strategic vision for a prosperous, modern, competitive and climate neutral economy – A Clean Planet for All.** The transition into a low carbon economy can be a chance for a comprehensive modernization of all parts of the economy and that Europe can become world leader for low carbon technologies.

Climate protection and economic success can go hand in hand, if barriers to the deployment and investments into low carbon technologies are removed. It is only through a clear and reliable framework that industries will make the needed long term investments for the transition.

The following key points are essential for the VDMA to prepare this transformation in a profound and reliable manner:

1. **2030 and future legislative framework**
   The EU put in place an ambitious but feasible 2030 energy and climate framework. It is now on Members States to deliver on this framework and implement it with appropriate and cost-efficient measures. The National Energy & Climate Plans (NECPs) are crucial in this regard, as they are the basis for the implementation of the EU energy efficiency and renewable energy targets and need to set the right level of ambition. The EU needs to continue its work on a clear and projectable framework which sets a signal for investments in low-carbon technologies.

   **Key recommendations:**
   - The **Commission assesses the NECPs** and is thus the guardian for ensuring the achievement of the 2030 energy and climate targets. If the Commission concludes that there is a lack on the level of ambition regarding the agreed targets, and makes use of the possible Union measures, set up under the Clean Energy Package, those **additional measures should be based on a horizontal approach.** As most of the savings potentials lie at systems level while those at the product level have already been tapped.
   - For a profound evaluation of the plans, Member States must include **verifiable numbers on measures**, specifically on energy savings and renewables, as concrete targets were agreed under the Clean Energy Package for those. The Commission should evaluate the NECPs on the basis of common criteria to allow for transparency and a proper, consistent evaluation of the NECPs.
   - A forward looking **reliable future legislative framework** should be set up for the upcoming decades and milestones in 2040 and 2050. As done under the Clean Energy Package, this should happen in an iterative process which includes all stakeholders.
   - Policy fields are more and more linked with each other. Preserving the overall coherence and consistency is crucial. The **future legislative files must be put in a coherent and coordinated framework** which is in line with the many interlinked and mutually dependent issues, like the “Energy Efficiency first” principle which requires legislative consistency under the Energy Efficiency Directive (EED), Energy Performance of Buildings Directive (EPBD), the Governance Regulation (GOV) and the Electricity Directive on consumer empowerment.
2. Technological neutral approach – using all options
It is only through a far-reaching and optimal mix of technologies that climate targets can be fulfilled. The 2050 strategy should therefore be built upon a technological neutral approach which enables machine manufacturers and users to choose and integrate the most suitable and best technological options and to continue to focus on the essential: to remain innovative and competitive.

Key recommendations:

- **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.

- **Strengthening applied research on enabling technologies in Horizon Europe** in order to create the technological building blocks for sustainable innovations.

- **Supporting the transition of SMEs and midcaps** towards a low-carbon economy by facilitating access to sustainable technologies and tools. In doing so, priority should be given to the measures which constitute the most efficient and cost-effective solution.

- Following a *technological neutral industrial policy* and innovation-friendly regulatory approaches.

3. Optimize market access for innovations
The in-depth analysis by the Commission has proven that the transition into a low carbon economy is possible with existing technologies, without the need of breakthrough technologies. Still these technologies have to further evolve in terms of their performance and costs. The availability of technologies on the market and their upscaling to large industrial scale and performance can however be disrupted by a non-optimized market design.

Key recommendations:

- **No disruptive impairment** – within the regulatory boundaries, there must be room for the development of new innovative solutions. Therefore consideration should be given to where *regulatory barriers can be reduced* in order to promote the upscale of low carbon technologies. Furthermore, models such as the “innovation deals” might be used to overcome regulatory obstacles.

- **Large-scale pilot applications** might help to upscale technological solutions and to serve as lighthouses and reference use cases. However, they must be limited to justified cases and not distort market and competition.

- An optimized **energy taxation framework** is crucial when it comes to implementing the energy and climate targets. The EU needs to set up a framework which is *avoiding competitive disadvantages of innovative energy carriers* through taxation requirements.

- VDMA shares the opinion that there is a funding gap in **sustainable investment**. The capital markets can be stimulated to contribute to better reaching the EU’s climate and energy targets. The VDMA supports the Commission’s approach of commencing the initiative with *establishing a taxonomy so as to define a common language for sustainable investment*. Economic activities that are classified as sustainable according to the established market-driven classifications should, in all cases, be accorded the same status in an EU taxonomy. In addition to the voluntary, market-
driven information on sustainability factors, companies already disclose a wide range of mandatory information in the scope of their financial and non-financial reporting. Information on sustainability is therefore already available to a sufficient degree, particularly from the larger companies operating on the capital market. The new taxonomy should therefore not lead to any additional reporting duties or disproportionate cost increases for the real economy.

4. Linking the EU roadmap with global climate efforts
Climate change is a global issue. A stable, rule based global approach is the key to climate change mitigation. The COP-negotiations have shown that the implementation process of the Paris Agreement is challenging but the global commitment to fight climate change has so far overcome this challenge.

Key recommendations:
- At the next COP25 negotiation, parties need to implement strong and reliable market mechanism, as set up under Article 6 of the Paris Agreement.
- Technology transfer and the accountability of its GHG reductions in other countries should be accountable domestically. The EU should take every effort to drive the global community towards ambitious but feasible mechanism.

5. Sectoral contribution
Sector coupling is the key challenge when it comes to a coordinated and comprehensive transition. The aim is to achieve the politically defined energy and climate goals in all areas of business and society while also ensuring security of supply and affordability as a triad of energy policy objectives. The networking of the energy, industry, buildings and transport sectors (i.e. the three markets of electricity, heating and transport) through sector coupling is crucial.

Key recommendations:
- Develop an economically sustainable and coherent framework for sector coupling. In the future, a comprehensive energy transition should not be financed solely by the electricity segment.
- Take the heterogeneity of processes in industry into account. Competitive solutions are necessary, but the technical requirements of the existing machines and systems must also be noted.
- Power-to-X for sector coupling: P2X is a promising component on the road to greenhouse gas neutrality. "Green" hydrogen and methane ("power-to-gas"), liquid fuels ("power-to-liquid") and chemical raw materials ("power-to-chemicals") are highly relevant for many areas (transport, energy industry, buildings, industry, etc.) of the Mechanical Engineering Industry.
- Regard CO₂ as a reusable material and take the first steps toward a climate-neutral carbon cycle.
- Treat buildings as communicating elements of a networked energy system. In order to meet the challenges associated with the growing proportion of renewable energies and the increasing variable load resulting from these, not only are highly efficient and smart buildings required, but also the possibilities offered by storage, energy supply and the use of demand response technologies. It must be possible to refinance this flexibility in a market.
- Implement the energy transition in the transport sector through alternative drives and fuels.
6. Digitalization
Digital technologies are part of the transition towards a low-carbon economy and have great potential when it comes to climate mitigation. They can help to identify opportunities and tap into efficiency potentials across value chains and sectors. Progress in technological options such as Artificial Intelligence enable new sustainable business models and facilitate better decisions. However, before the full potential can be harnessed, substantial barriers have to be overcome.

Key recommendations:
- In order to enable data sharing and connectivity, both citizens and companies need trust that their data is protected – personal data, trade secrets and knowledge.
- An essential prerequisite for acceptance and use of digital technologies is cybersecurity. For instance, a horizontal product regulation for B2B-devices in accordance with the New Legislative Framework is urgently needed to create a reliable basis and the European level playing field for industry -4.0- security.
- The basis for sustainable and competitive business models in Europe is a first class infrastructure (5G, Broadband), also in non-urban areas.
- In order to ensure a great impact, a wide range and high number of enterprises need to have access to technologies and expertise.

7. Circular Economy
Circular Economy has become a megatrend that also has a lasting influence on the mechanical engineering industry. The VDMA sees this as a great opportunity. Changing product and production requirements call for technological solutions supplied by mechanical engineering.

Key recommendations:
- Coupled with the possibilities of digitization and data analysis, Circular Economy creates space for new business models. The European Union has become the global pioneer of Circular Economy approaches. What is important now is that concrete implementation is open, market-driven and globally connectable.
- The concrete legal framework conditions for mechanical engineering are laid down in the technical legislations. The Eco-design Directive is a relevant instrument that defines the conditions for a recyclable product. In order to create uniform standards throughout Europe, the European Commission has instructed the European standards organizations to develop definitions and measurement methods. With regard to the political implementation of the ongoing standardisation work, the VDMA argues that consumer goods and industrial goods in particular should be treated differently - especially in the area of longevity and reparability, there are market opportunities that do not speak in favor of regulatory intervention.
- Plastics strategy: plastics have to meet very different demands and functionalities. That rules out having uniform specifications for recycling. Reliable quality criteria should be developed for recycled plastics, facilitating their use in industry.

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