

THE EUROPEAN GREEN DEAL & THE “FIT FOR 55”-PLAN CHALLENGES AND OPPORTUNITIES FOR THE PT/MC INDUSTRY (PART I)

Dear Members of the EPTDA,

You may already be aware of the European “Green Deal” and the “Fit for 55”-plan, ambitious projects put forward by the European Commission as a strategy for sustainable economic growth. These plans aim to transform Europe into a climate-neutral continent, resulting in a cleaner environment, more cost-effective energy, smarter transport, and new job opportunities.

Considering the impact that the Green Deal and the “Fit for 55”-plan will have on all of us, including the PT/MC sector, the EPTDA Bureau considered it useful to provide EPTDA’s members with background information and support on both these programs. However, the ambition is not to make EPTDA’s members legal or compliance experts on the EU environmental policies and regulations. In line with this philosophy, we will introduce you to the Green Deal and the “Fit for 55”-Program in this first EU Monitoring Report 2023. In subsequent reports, we will strive to highlight in more details those aspects of the Green Deal that may be of importance to the PT/MC Industry.

Implementing the Green Deal and “Fit for 55”-programs will require a variety of actions and initiatives from different sectors. In addition to investing in research and innovation, the European Union will also need to ensure that the infrastructure and policies are in place to support the project. However, let’s also remember that these programs offer some tremendous opportunities for the industry to develop and supply sustainable products and services that contribute directly or indirectly to reducing greenhouse gas emissions, promoting energy efficiency, and advancing a circular economy.

THE EUROPEAN GREEN DEAL AND THE “FIT FOR 55” PLAN IN A NUTSHELL.

1.1. The European Green Deal:

The goal of the European Green Deal is to make the European Union's economy sustainable by 2050. It aims to achieve climate neutrality by then.

The primary objective of the Green Deal is to reduce greenhouse gas emissions (with a net-zero level by 2050). This will be accomplished through a variety of measures, including expanding the use of renewable energy sources, such as wind and solar power, and enhancing energy efficiency in buildings, transportation, and industry.

Another vital aspect is the promotion of sustainable and low-carbon transportation, which includes measures to increase the use of electric vehicles, enhance public transportation, and invest in sustainable and low-carbon aviation and shipping.

Additionally, the plan includes measures to increase the use of biofuels and hydrogen in the transportation sector. The Green Deal further aims to protect and restore natural habitats and biodiversity, as well as to promote sustainable agriculture and forestry.

Finally, it promotes a circular economy, which aims to keep resources in use for as long as possible, extracting the maximum value from them whilst in use, then recovering and regenerating products and materials at the end of each service life.

Funding for the Green Deal will come from a variety of sources, including the EU budget, private investment, and funding from member states. The EU budget will be used to support research and innovation, as well as co-finance projects that contribute to the Green Deal objectives. Private investment will be encouraged through measures such as tax incentives and guarantees. Member states will also be expected to contribute funding through their national budgets. When presented, the overall goal was to mobilize at least €1 trillion in investments over the next decade.

1.2. The “Fit for 55”- plan

The "Fit for 55" plan is a package of measures to help the European Union achieve its goal of reducing greenhouse gas emissions by at least 55% already by 2030, compared to 1990 levels. The goal of the "Fit for 55" plan is to accelerate the EU's transition to a climate-neutral economy, in line with the Paris Agreement and the European Green Deal.

The "Fit for 55" package includes a number of measures to reduce greenhouse gas emissions across different sectors of the economy, including:

- Increase the EU's 2030 target for renewable energy (to at least 34%)
- Increase the energy efficiency target (to at least 38%)
- Increase the share of electric vehicles on the road by 2030
- Reduce the carbon footprint of buildings
- Reduce the CO2 emissions from heavy-duty vehicles

- Cut the emissions from aviation and shipping
- Increase the use of hydrogen and biomethane
- Promote sustainable agriculture and forestry

The "Fit for 55" plan also includes a number of measures to support the transition to a climate-neutral economy, such as:

- Establishing a carbon border adjustment mechanism to ensure that products imported into the EU are produced with the same environmental standards as products produced in the EU
- Providing support for regions and communities most affected by the transition
- Investing in research, development, and innovation to support the transition
- Aligning EU trade policy with the EU's climate and environmental goals

1.3. What is the relation between the “Green Deal” and the “Fit for 55”- plan?

The European Green Deal and the "Fit for 55" plan are closely related.

However, the European Green Deal is a broader, long-term plan that aims to make the EU's economy sustainable by 2050, where the "Fit for 55" plan is a specific package of measures that aims to help the EU achieve its goal of reducing greenhouse gas emissions at least for already 55% by 2030, compared to 1990 levels.

Both plans are complementary and aim to achieve the same goal, which is a climate-neutral EU economy.

OVERALL CHALLENGES FOR THE MANUFACTURERS AND DISTRIBUTOR OF THE PT/MC INDUSTRY MIGHT BE CONFRONTED WITH AS A RESULT OF THE EUROPEAN GREEN DEAL AND THE “FIT FOR 55”- PLAN.

Similar to other industries, the PT/MC industry will most likely face various challenges as arising from these very ambitious plans. Without claiming to be exhaustive, we can anticipate the following factors that will need to be considered:

- New energy efficiency standards: Proposals to increase the energy efficiency of products and systems may mean that manufacturing PT/MC companies will need to update their products and processes to meet these new standards and distributors will need to ensure that the products they sell comply with them. This will necessitate

investment in research and development to improve energy efficiency and may require testing and certification to comply with new standards. Such processes could add additional costs to the manufacturing process.

- Emissions reductions: The Green Deal's goal of achieving net-zero greenhouse gas emissions by 2050 will likely require PT/MC companies to reduce the emissions associated with their products and processes. This may involve changes to manufacturing processes (such as switching to low-emitting manufacturing processes), sourcing materials (using materials that have lower emissions such as bio-based materials), or the use of alternative lubricants used in their production process (such as biodegradable lubricants). At the same time, PT/MC Distributors will likely be required to consider the emissions associated with the products they sell and may be required to seek out products with lower emissions.
- Circular economy: the concept of circular economy aims to keep resources in use for as long as possible and to extract the maximum value from them before recovering and regenerating them. For manufacturers this could mean they will have to rethink their product design and manufacturing processes with the end of life of the products in mind, so they can be easily disassembled, repaired, refurbished, remanufactured, or recycled. For distributors, this can make them need to think differently about how they source and sell products with the same focus on reusability and reparability, and to rethink their product portfolio with a focus on products designed for circularity.
- Decarbonization of industrial processes: The Green Deal aims to reduce emissions in industrial processes. PT/MC companies that supply products and services to industrial customers will need to take the decarbonization of these processes into account and develop and supply products that can assist these industries in meeting their emissions reduction targets.
- Compliance with new regulations: The Green Deal and the “Fit for 55” are expected to result in new regulations and standards being put in place. Both manufacturing and distributing PT/MC companies will need to follow up on and understand these changes and comply with these regulations and standards. The industry may also face increased scrutiny and oversight from regulatory bodies to ensure compliance with new regulations and standards related to the Green Deal.

Overall, as an industry, we will need to prepare for changes in energy efficiency and emissions standards, as well as new regulations and standards that may be introduced. Companies will also need to consider how they can adapt their products and processes to support the transition to a more sustainable economy, while identifying opportunities to capitalize on the transition. For both manufacturers and distributors an in-depth knowledge of the products’

direct or indirect environmental impact will become more and more important in order to give the appropriate guidance to respective customers.

OPPORTUNITIES FOR BOTH THE MANUFACTURERS AND DISTRIBUTORS OF THE PT/MC INDUSTRY.

From a business perspective, every challenge creates opportunities. Let us not forget that the European Commission, with its goal of becoming a climate-neutral continent by 2050, not only has a cleaner environment in mind, but also aims to achieve sustainable economic growth and create new job opportunities. In this sense, we could conclude that the Green Deal and the “Fit for 55” program may create significant opportunities for PT/MC companies.

The specific opportunities will of course depend on the exact areas of focus within the PT/MC sector, the type of products, and on the evolution of the green deal proposals, but, in general terms and without claiming to be exhaustive, the aforementioned challenges could also be transformed into business opportunities, such as:

- With renewable energy sources becoming more prevalent, there will be, for instance, an increased demand for wind turbines and solar panels. Turbines use gearboxes and other mechanical power transmission systems to convert the energy generated by the turbine's blade into electricity. Bearings support the rotors and allow them to rotate, and wind turbines use generators to convert the mechanical energy from the rotor into electrical energy. Control systems to optimize performance will also be needed.
- As the importance of energy efficiency is emphasized, this creates opportunities for PT/MC companies to develop and supply energy-efficient products and systems, such as high-efficiency motors, variable speed drives, high-efficiency gears and belts, helping to optimize the energy consumption of the motor and the efficiency of the power transmission systems in general.
- With a focus on reducing carbon emissions, there is and will be an increased demand for electric vehicles. These vehicles use, for example, motion control systems to control the movement of the wheels, and they also use mechanical power transmission systems to transfer power from the electric motor to the wheels.
- The Green Deal targets reducing greenhouse gas emissions in industrial processes as well. PT/MC companies could develop and supply products and systems that help (in)directly decarbonize these processes, as well as machine learning-based predictive maintenance services.

- The promotion of a circular economy could create opportunities for PT/MC companies to develop and supply products that are designed for longevity and reusability, in order to extend the product's lifespan, including the use of modular design, standardization of components, and the use of materials that are easily recyclable. Products designed to have a second life after their initial use, such as being repurposed for other applications or being used in a different industry, could also be developed. Additionally, the potential for development of services to improve recycling and refurbishing, such as reverse logistics and circular supply chain management, as well as resource-efficient production with closed-loop production systems focusing on minimizing waste and reusing materials.

Of course, these are just a few examples to emphasize that the “Green Deal” and the “Fit for 55” do not have to be a story of challenges and obligations alone, but also provide a range of opportunities. It is our ambition to illuminate certain aspects of these proposals and (upcoming) regulations that are relevant to the PT/MC industry in a future contribution in the further 2023 EU Monitoring Reports.

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Source of references, further information and timeline

- A European Green Deal – Striving to be the first climate-neutral continent ([European Commission](#))