

The Green Deal is not “ideological regulation”

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This paper highlights how the European Green Deal aims to achieve the temperature targets that are essential, according to climate scientists, to mitigate global warming. It then takes into consideration the objections raised by governments and the industrial world that aim to loosen the regulation, highlighting its instrumentality (technological neutrality) and groundlessness (automotive crisis caused by regulation).

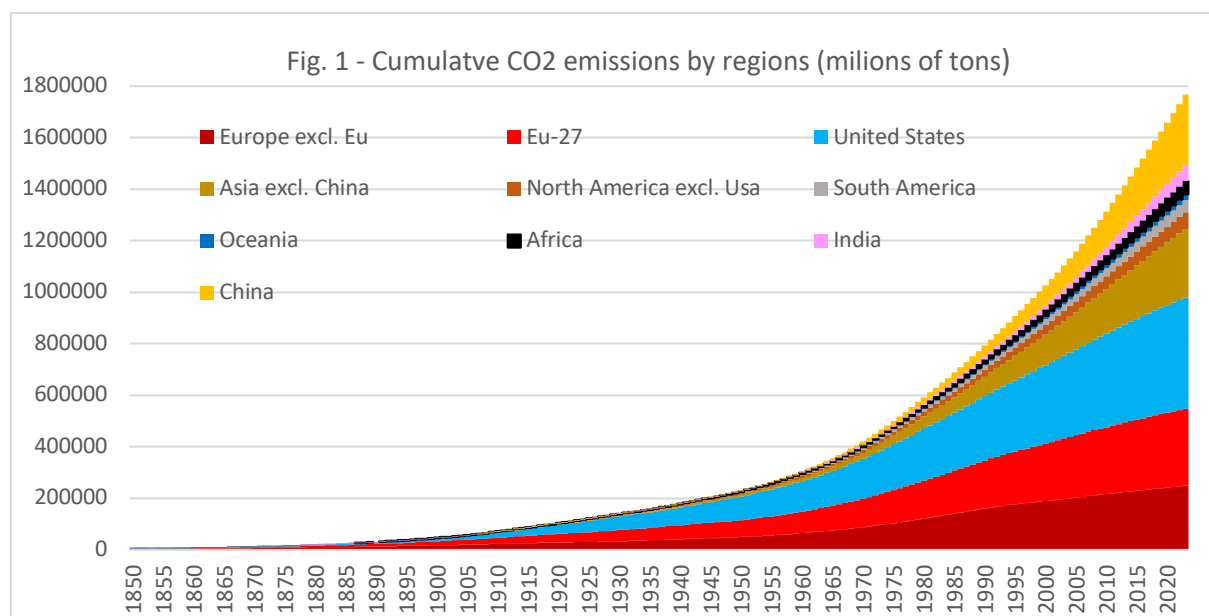
The European Green Deal and the related operational arm “Fit for 55” - which among other provisions establishes the end of the sale of endothermic cars in 2035 - aim to cut net emissions of CO₂ (the main component of greenhouse gases) by 55% by 2030 and to eliminate them by 2050. This is functional to the achievement in the EU of the objective of the Paris Agreement of limiting the increase in temperatures in this century to within 1.5 degrees compared to the pre-industrial level (average of the period 1850-1900). In the 12 decades leading to the decade 2011-2020, global warming was already more than 1 degree, essentially due to human production and consumption activities. The 1.5 target therefore implies that on average we have an additional half a degree of warming available in the 8 decades that separate us from the end of the century. Current trends are not encouraging. In the current decade (2020s), previous warming records have already been exceeded, while in the single year 2024, the global temperature (average of different measurements) exceeded, for the first time, the increase of 1.5 degrees. It will therefore be necessary for the out-of-line trends to be compensated by future moderations. It is important to underline that the emissions and temperature targets do not constitute the bureaucratic diktat of an extremist green ideology, as is sometimes said. Instead, they are based on the best scientific knowledge at a global level - conveyed in the International Panel on Climate Change (IPCC) of the United Nations - on the evolution of the climate, the impact of global warming and the risks of exceeding different temperature thresholds (see for example IPCC, Climate change 2023). Here we recall three of the key messages of these studies.

- Zeroing net CO₂ emissions in 2050 has a probability > 50% of being associated with limiting temperatures to 1.5 degrees: there is therefore no certainty, but probability.
- What counts is the accumulation of emissions whose increase (flow) must be slowed so that the stock does not reach levels of no return: the path to zeroing in 2050 is essential.
- Precisely because of this path dependence, what is done in the current decade is crucial for the result, with the corollary that global emissions in 2030, implied by current national reduction commitments, make the 1.5 degree target very unlikely: more needs to be done in these years.

¹ The original Italian version of this text appeared in [Menabò di Etica&Economia](#) on January 14, 2025

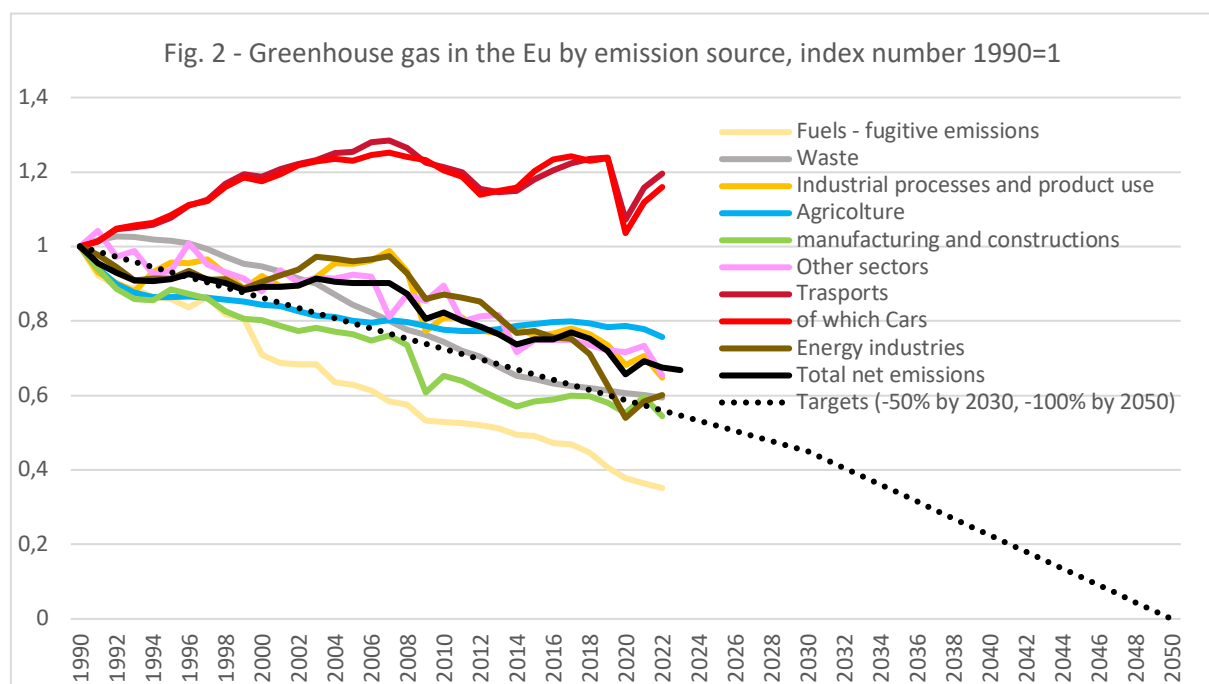
The type of human (and therefore also economic) life that can be carried out on the planet will depend on whether or not the objectives of the Paris Agreement are achieved. Going beyond the targets means increasing the intensity and spread of extreme climate events, which we have begun to experience, with increasing damage and costs (for agriculture, water, health), causing sea levels to rise (we fear what could happen to Venice, but millions of people in the world would also be affected, especially in poor areas), inducing the destruction of entire ecosystems and biodiversity with economic consequences that are difficult to evaluate. It goes without saying that in such a perspective, migrations to escape from areas of environmental disasters would be even more massive and wars for scarcity of resources more frequent than what happens today. It is a perspective that does not concern future generations, far from us: those who would experience the most serious effects of the possible failure of the Paris agreement have already been born.

The sense of urgency is therefore evident. Climate mitigation should be the exclusive guide to economic and industrial policy choices, with minimal room, given the ongoing deterioration, for compromises with other short-term needs, whether industrial or sectoral competitiveness. Yet, despite this, we still hear critical statements (bordering, in truth, on cynicism) such as the one about the unrealistic nature of the Paris targets or about the fact that the European Union is not a major polluter (being responsible for 7% of global emissions), so its action would be a drop in the ocean, compared to the commitment that the countries that emit the most CO₂ (China, with 30%) should make. On the unrealistic nature of the targets, one can only point out that the alternative path, according to climate science, is towards environmental disaster: so are the “realistic critics” perhaps saying that it would be preferable if humans in 2025 decided, for themselves and for others in the years to come, to move towards a similar perspective? On the limited contribution of Europe, it is worth remembering that, as mentioned, it is not the flows that count, but the accumulated stocks of emissions, since the current state of global warming depends on them. From this perspective, global warming is largely a consequence of the capitalist development of advanced countries: 60% of the stock of emissions is due to them, with 30% of Europe and 17% of the EU (fig. 1). It is therefore these economies that must take charge of climate mitigation, as well as providing adequate financial means to poor countries so as not to preclude them from the path of “clean” economic and social development.



Source: computations on data from Global carbon budget (2024) and Our World in Data

The Green Deal is therefore the way in which the European Union defines its contribution to the Paris objectives. It is certainly a regulation not without flaws. It is even accused of ideology, abstractness, excessive ambition of objectives. The latter, instead, constitutes the best and most advanced part. The European car crisis was the occasion to catalyze the crescendo of protests from governments (the conservative ones, but not only), industrial associations and car companies. The criticisms can essentially be summarized in two points: 1) it is necessary to pursue a technological neutrality approach to decarbonization; 2) the Green Deal regulation is the cause of the problems of car manufacturers. Before addressing these criticisms, it is useful to highlight the situation of the sector in the decarbonization process. Between 1990 and 2022, transport should have reduced CO₂ emissions by about 45% to keep pace with the 2050 carbon neutrality objective, in which direction all the other sectors have begun to move, albeit insufficiently (fig. 2). Emissions from the sector have instead increased, in this period, by 20%, with motor vehicles responsible for 60% of the CO₂ of the entire sector. The gap between the actual path of emissions and the one that these should have followed is an essential aspect in the discussion on commitments, timescales and environmental responsibilities. Let's come to the disputes.



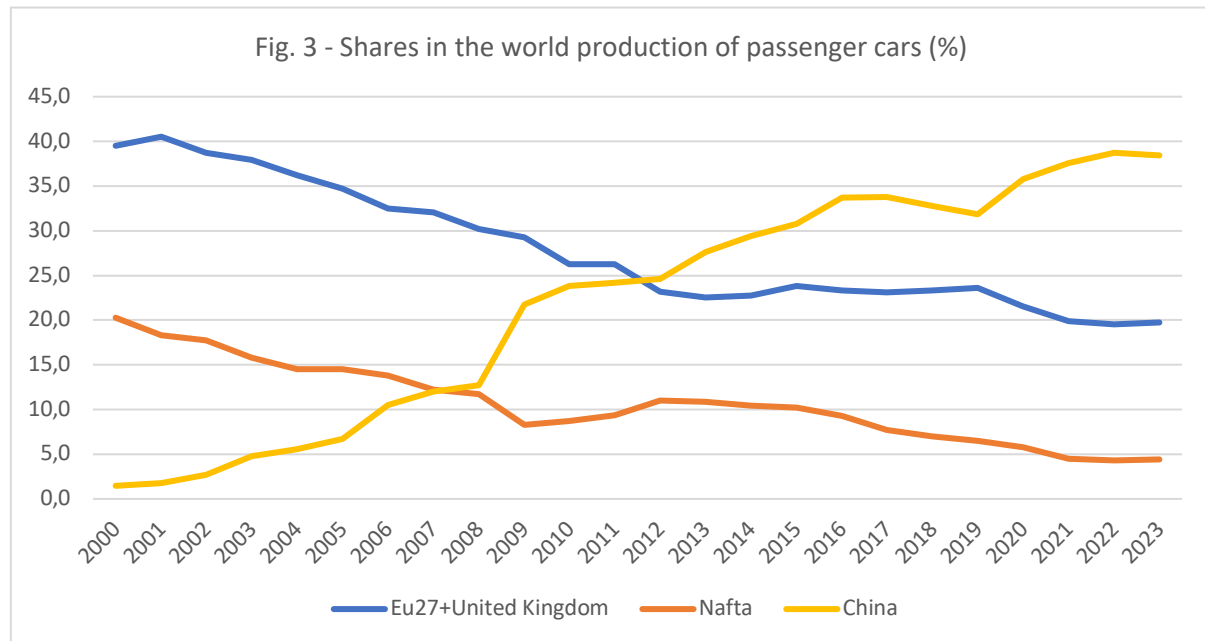
Source: computations based on data from Eurostat

Technological neutrality. This criticism, which the Draghi Report also indulges in, does not explicitly call into question the objectives of the Green Deal on the car. The decarbonization target – it is argued – remains firm, but there is no single alternative to fossil fuels: the market/businesses must be left with the possibility of identifying the best technological option (e-fuels, bio-fuels and hydrogen, which would safeguard the mechanics of the European car, as well as electric propulsion). The regulator should limit itself to making the externalities induced by the use of “dirty” technology adequately expensive for producers and citizens (carbon pricing); the rest (the choice of the most efficient technological standard) comes naturally. Now, if we look closely, the European approach does not formally deviate from these conditions. The CO₂ standards set by the EU are neutral, in the sense that they do not prescribe a specific technology: they focus exclusively on the objective of zero exhaust emissions. And the taxation

of externalities is also an integral part of the European strategy through the “cap-and-trade” system, with emission permit trading (ETS) and carbon price adjustment mechanism on imports (CABM). So what is “wrong” with this technological neutrality? Its central aspect is wrong: the fact that the regulator sets a precise path to zero emissions, with deadlines and penalties for defaulters. It is the definition of the trajectory, dictated by the timing of climate deterioration, that makes the approach no longer so neutral: the technology that leads to decarbonization, compatible with the established path, in which investments have been made for a long time and therefore susceptible to continuous improvements, is the electric one.

Appealing today for the regulator to refrain from favoring – even if only indirectly, by setting trajectories – a technological standard seems like a request that is out of time. If there ever was a “Pigou moment”, i.e. a phase in which one could perhaps think of having enough time to entrust decarbonisation exclusively to price mechanisms, it probably passed decades ago. And, moreover, if it has not been done, it means that that possibility – an endogenous decarbonisation induced by price signals – has never actually occurred due to market imperfections. The automotive sector is not in competitive conditions, there are plenty of distortions; it is not populated by rational, fully and equally informed agents. These imperfections – including the absence of crucial markets with regard to long-term technological developments (Stern 2022a and 2022b) – have not allowed that possibility to emerge at the moment in which it was hypothetically feasible. Those same imperfections, in a climate context worsened by previous inaction, today require the interference, guidance and coordination of the regulator (see also Elmer 2024 on this), at least in the minimal form of defining the times for zeroing emissions. Therefore, saying in 2025 that technological neutrality is needed appears to be a way of veiling a much more concrete objective: dismantling, in the name of the competitiveness of European industry, the most qualifying aspects of the Green Deal on CO2 standards and related regulation.

Green Deal and the automotive crisis. The problems of the European automotive sector are the subject of extensive and detailed analyses to which reference is made (see Cavara and Zirpoli 2024 and Zirpoli 2024 and, for Italy, the reports of the Ca’ Foscari Observatory). What is important to underline here is that the causes of the current difficulties have nothing to do with the advent of the Green Deal. This sector has been hit by profound global transformations that have induced a shock to the geography of specializations. Consumer preferences have begun to change on the demand side. In mature markets, mainly replacement markets, that little bit of additional demand from the new generations that express a lower desire for cars than their predecessors has disappeared. In rapidly growing markets, where sales can expand, there has been a clear change in tastes, with the growing demand for electric rather than endothermic cars. On the supply side, the new technological paradigm of “car making” has begun to assert itself, based on electric transmission, software and telecommunications. The European industry, tied to its old comparative advantages in automotive manufacturing, has been displaced. The comparison with China reveals a loss of ground compared to new competitors that comes from afar. Between 2000 and 2022, the Chinese share of global car production went from 1.5 to almost 40%, compared to a halving of the European share from 40 to 20%. The overtaking of the Europeans occurred at the beginning of the last decade (fig. 3). The widening of the gap was then further stimulated by the transition of Chinese car makers to electric, which occurred not in recent years, but from the middle of the last decade. At the same time, the demand for electric vehicles has grown rapidly in the Chinese market (up to about half of new car sales), for which European manufacturers, especially German ones, have been unprepared because, unlike local car manufacturers, they do not have the required product.



The loss of competitiveness of the European car is therefore not due to the effect of an “ideological” regulation. What contributed to it was what appears to be a lock-in in the old technology, fueled by short-sighted strategic choices, high profitability objectives in the short term, underestimation of the innovative capabilities of competitors and, also, a regulation that has not been effective for a long time, prey to the interests of the major producers (Pardi 2020). But what matters most, even more than the crisis of a sector, is that all this has caused environmental damage, slowing down the path of reducing emissions. Attributing the car crisis to a lack of technological neutrality – by suggesting the existence of trade-offs between climate and safeguarding the European way of making cars – only prolongs this harmful trend, with a culpable underestimation of what climate science has been saying about global warming for some time. The future of car decarbonization is, in all areas, in electrification (in addition to Chinese dynamics, it should be remembered that 12 US states have set the end of endothermic in 2035). To affirm that the European car, with its production interdependencies and the need for outlets in rapidly growing markets, still has a different path available is, yes, ideological. The Green Deal is essential for climate mitigation according to the indications of the Paris Agreement; it can also be functional to recover at least part of the technological gap accumulated, due to their own choices, by European car manufacturers.

Bibliographical references

Cavara R., Zirpoli F. (2024), “Industria dell’auto o Green Deal? Il falso dilemma dell’Europa”, Lavoce.info, 18 dicembre 2024.

Elmer C. F. (2024) “Technology-neutral vs Technology-specific Policies in Climate Regulation: The Case for CO2 Emission Standards”, Agora-Ecco Discussion paper, October.

IPCC (2023), “Climate change 2023, Report of the Intergovernmental Panel on Climate Change”, United Nations Osservatorio sulle trasformazioni dell’ecosistema automotive italiano, Rapporti 2022 e 2023.

Pardi T. (2022), “Heavier, faster and less affordable cars. The consequence of EU regulations for car emissions”, Etui (European trade union institute) Report.

Stern N. (2022), “A time for Action on Climate Change and a Time for Change in Economics”, The Economic Journal (May).

Stern N. (2022), “Towards a carbon neutral economy: How government should respond to market failures and market absence”, Journal of Government and Economics (Summer).

Zirpoli F. (2024), “Una mobilità sostenibile è possibile”, Lavoce.info, 31 ottobre 2024.