**DOES SUSTAINABILITY ENTER THE LEGAL FRAMEWORK FOR ANTITRUST TREATEMENT OF TECHNOLOGY TRANSFER AGREEMENTS?**

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**Extended abstract**

1. **Introduction. The notion of sustainability in technology transfer**

Many technologies that are needed to achieve Net Zero and to arrive to more sustainable ways of production and consumption are not yet there. But quite of few of these technologies are already available and only await to be transferred to undertakings willing to bring them to market fruition. Whether yet to come or already existing, workable, IP-protected technologies are or will be available for exploitation, but to the extent they remain unused their contribution to the green transition will be null or poor. Historically, in all most advanced economies the legal system has been seen as instrumental, among other things, to creating the conditions that favor innovative activities and technology transfer. The same belief holds as far as technologies for the green and energy transitions are concerned.

Antitrust rules are significantly responsible for the improvement of market conditions that favor the exchange of proprietary technologies between the public and the private sectors and among private companies. The main contemporary and most advanced economies adopt antitrust provisions for research and development and technology transfer; Europe and United States are the front runners in the international legal order in stimulating technological collaboration and exchange of technologies that are protected by intellectual property rights, under the belief that both antitrust and intellectual property laws share the same goal of promoting innovation and, eventually, consumer’s welfare.

Post-covid measures to foster growth and resilience and to incentivize the production of climate-friendly technologies have set in motion competition among states, that are now working to re-design industry sectors and lay down the rules for what it has been termed a Green New Deal, as well as to face a number of challenges, such as supply of critical raw materials.

At the interface of antitrust and intellectual property policies, there are several aspects worth investigation in view of defining the contribution of law to the achievement of goals of green and energy transition. First of all, is sustainability a shared policy among states when shaping market conditions for parties willing to cooperate? To what extent antitrust laws accept sustainability as a goal, or should do so? About technology transfer agreements in an antitrust perspective, are states (Europe and the United States) converging in the name of achieving sustainability or differences still matter?

The United States Department of Justice and the Federal Trade Commission renewed their policy on licensing intellectual property in 2017 and Europe is in the process of reviewing competition rules on technology transfer, after adopting in 2023 new provisions on R&D and specialization agreements, that are also concerned with intellectual property rights. Will the European Commission take into account goals of energy transition and environmental sustainability in adopting new rules for the antitrust treatment of technology transfer agreements? While many scholarly contributions have investigated the interaction between antitrust, climate change and sustainability in general, so far a specific discussion about technology transfer is missing and this work aims at filling the gap.

Sustainability is a worldwide goal; to the extent technology transfer is facilitated by antitrust rules, available technologies could be deployed at a more rapid pace and intellectual property owners would receive incentives not only to develop and protect technologies, but also to transfer them on the market when complementary resources are necessary for the full exploitation of technologies. If the problem is global, legal solutions cannot remain limited to specific political areas. To the extent models and policies become shared and widespread, they might have a better chance to concur in the goal. This paper aims at investigating the comparative dimension of the current legal order at the interface of intellectual property, antitrust, and the policies to tackle the climate change and reach more sustainable models of production, supply and consumption.

1. **Sustainability and the law**

If sustainability is intended broadly as referred to the SDGs, it clearly embraces so heterogeneous and wide goals as to become unmanageable for the antitrust policy (and probably for any other general single policy). Much of the current legal debate relates to the possible inclusion of sustainability among the goals of antitrust, which is per se a traditionally hotly debated issue. The broader and wider the notion of sustainability, the more likely a hybridization of antitrust policy with sustainable goals would result inconsistent with the antitrust orthodoxy of economic efficiency and consumer welfare and attract critics [Bejček 2023].

Truth is that ESG values are very diverse and broad and when sustainability arguments are referred to technology transfer also social value can become relevant, as it is the case when North-South technology transfer is considered. And government values as well can become part of the legal discourse, as it happens for cases of transfer of dual use technologies and code of conducts for multinational corporations. It is not the intention of this work to adopt such a broader perspective of reconciling all environmental, social and governmental issues with antitrust under an overarching definition of sustainability. Others have embarked in such effort and there are already significant contributions and multiple conclusions. To a more limited extent, the topic here is contained in a more manageable goal and it boils down to the question whether a very specific notion of sustainability (one that is intimately linked with tackling the issue of climate change and the fight against CO2) can be accepted in reviewing agreements for the transfer of environmentally-related technologies.

Notwithstanding the ambitions of the European Green Deal, a very faint reference to it is made in the new antitrust block exemption regulation for research and development agreements, but the connection is weak. More practical implications for the assessment of agreements among competitors can only be derived from the Guidelines on horizontal cooperation agreements, which have been reviewed in 2023. Yet, there is no doubt that a more favorable legal framework could be conducive to agreements for the generation and the exploitation of intellectual property rights over climate-friendly technologies.

Although a significant part of the market is made by public research institutions and start-ups, whose market shares very rarely create concerns for antitrust (and, as far as technology transfer agreements are concerned, the safe harbors of current regulations are sufficiently wide), go-to-market strategies for climate-related technologies require significant capital expenditures and higher levels of collaboration, typically with larger operators. As a consequence, certain kinds of collaborations could become more alarming for antitrust purposes and well exceed the safe harbors or include provisions that fall into the category of prohibited restrictions (black or grey lists).

Under the current enforcement policy (the one blessed in the TTBER and the Guidelines) there could not be any room for specific arguments about the pursuit of concurrent environmentally appreciable goals by the parties. But the importance of environmentally sustainability goals requires an additional effort, at interpretative (positive) or at normative level, to ascertain whether technology agreements with a main or concurrent ability to favor the transfer of climate-related technologies can (or should) be treated differently. For instance, when considering the large upfront costs for research and development (of the licensor) and the capital expenditures (of the licensee) required to move a proprietary technology from lab to market, it becomes a legitimate question whether the assessment of a no-challenge clause should be conducted in a more purposive way.

A green (or greener) antitrust has been opposed in general on a ground of economic arguments. A conclusion is shared that more competition, not less, brings about investments in sustainability and a more lenient antitrust treatment for sustainability agreements among competitors would not be justified.

It can be easily agreed that lowering the general antitrust enforcement to favor the transition does not necessarily lead to sustainable investments. Intrinsic motivation as well as other reasons can make firms not responsive antitrust and competition, more than cooperation, would be conducive to increased welfare. We have to concede that very rarely a business combination or a transaction are sought by competitors exclusively for sustainability purposes. Sustainability, if ever, concurs with other reasons that support a given corporate strategy. Of course, there cannot be any more favorable treatment if the agreement (whether vertical or horizontal) does not contemplate an at least substantial contribution to the improvement in terms of environmental goals. Hence, more often than not sustainable goals run in parallel with other business reasons pursued by the parties. And, no matter how sophisticated could be the analysis, there is always the risk that the effects of restrictive practices exceed the environmental benefits. But it must be also conceded that when the agreement entered into by the parties is specifically intended to pursue a climate-related goal – as it is the case when a green technology is transferred – there can be reasons to justify a more favorable antitrust

1. **Technology transfer agreements and the antitrust treatment in Europe and in the United States**

«Competition rules are the essential outer boundaries within which companies develop their activities» [Haucap et al 2024, 4]. As a matter of fact, antitrust provisions are the body of law that is more directional with respect to private autonomy and agreements among companies and competitors. It is probably for the dominating nature of mandatory rules of antitrust that this policy is often charged historically with goals and purposes that go beyond what its rules and enforcement mechanisms are really able to achieve.

Faced with the importance of tackling the climate change in all possible ways, including through favoring the transfer of environmentally-related technologies, it is now time (i) to consider whether the current legal framework could be interpreted as to accommodate arguments that make environmentally sustainability consistent with antitrust goals for the treatment of technology transfer agreement, (ii) in the negative, to discuss whether there is room to introduce such arguments in the process of review of the TTBER in Europe and (iii) which practical implications could such renewed policy have in the assessment of technology transfer agreements.

In the broader debate on antitrust goals, interests other than efficiency and consumer’s welfare are considered not core and ‘external’ to the pursuit of an orthodox policy. The inclusion of further values among antitrust goals is one of the aspects that underlies the most significant distance between Europe and United States. By time to time, in Europe market integration, fairness, small business protection, freedom of contracts and others have been considered relevant, marking a significant departure from the truly economic perspective of antitrust laws.

Contrarians have repeatedly underscored the risks and the side effects of including other interests in antitrust enforcement and suggested that sectoral specific values would be pursued in a more balanced, foreseeable and consistent manner through ex ante regulation rather than enforcement of antitrust rules. It is beyond the purpose of this paper to join the debate and to attempt a general answer. Complexities of markets and concurrence of interests make application of rules no more difficult in antitrust than in many other fields.

This paper takes a radically different view. It assumes that environmental sustainability and the fight against climate change are no longer social or non-economic values, but have progressively become of economic nature and consequence, as it is apparent from the many implications of climate change, that has direct impact on the welfare of consumers (think of the prices of commodities in agriculture floating because of abnormal seasonal heats or floodings). While this understating of sustainability is opposed on the one side [Bejcěk 2023] or could be even generalized and brought in antitrust analysis as an argument to redefine the notion of consumer welfare, it is way too obvious that it is a remarkable departure from the idea that harm to consumers stems from cartels or abuses of dominant firms. Climate-related damages harm consumers but not as a consequence of firms’ coordination. Yet, if the goal is to accelerate the introduction and the adoption of such technologies firms coordination might be necessary even if potentially restrictive for the competitive process.

When specifically addressing the recurrence of the elements that under art. 101, para. 3, TFEU, justify the inapplicability of prohibitions to restrictions, tackling climate change means adopting, *inter alia*, technologies that promote technical and economic progress by also favoring less carbon-intensive production means and in many other ways. In this respect, climate-related technologies do bring about technical and economic progress, with an impact that very often results in benefits for consumers, that become substantial as new technologies enter the market and progressively become widely adopted. There should be conceptual space to argue in favor of the economic and endogenous nature of such technologies with respect to the goals of antitrust.

The inclusion of other policies among antitrust goals has been criticized, also for the potential risk to dilute the genuine goal and to introduce arbitrary elements in the assessment of market behaviors. A narrower notion of sustainability, that refers to the mitigation of climate change is significantly less exposed to this risk, since the impact of sustainable actions is more objectively measurable (in terms of CO2 reduction, share of transition to renewables, percentage of savings etc.).

Once better defined and measurable, a goal of sustainability needs to be operationalized. That is to say, it has to command predictable results in the application of standard and rules for antitrust analysis. Pursuant to the aim of this paper, it has to be seen how sustainability can enter the assessment of technology transfer agreements in the current framework and, in perspective, in view of the possible new version of the TTBER and related Guidelines.

1. **Discussion and a proposal**

The new understanding of environmental sustainability as an economic value that enters the antitrust analysis, would probably render a normative change unnecessary. As a consequence, the expected framework for technology transfer agreements does not require an express mention of ‘sustainability efficiencies’ as elements to consider in assessing parties’ collaboration. What would probably recommend caution though are the possible side effects of an express policy of favoring technology transfer agreements for environmental-related technologies. Here too there is a serious risk of greenwashing. As it has been pointed out, «[a]n ‘opening up’ of competition law is often viewed with concern, not least because of ‘greenwashing’ by companies» [Haucap et al. 2024, 4] and it is might well be that companies seize the opportunity of a potentially more lenient antitrust treatment for agreements related to the transfer of green technology to build a reputation of being ESG-compliant when in fact they are not. Even assuming that is desirable to inject sustainability into a multi-value antitrust policy, in fact it would be extremely difficult if not impossible to spot agreements that, although restrictive, do seriously pursue environmentally desirable goals as their primary object as opposed to arrangements that only marginally, if ever, show benefits for the green transition.

It can be assumed that sustainability is a genuine goal when the owner of the intellectual property over the green technology is a public research institution. Irrespective of the market shares of the parties involved in the transaction (a research institution like a university can only be active on the innovation market) the agreement is necessarily beneficial, since one of the few ways in which public-funded technologies can reach the market is through a license agreement. Other then for the public-to-private technology transfer agreements, the problem remains for agreements among companies.

The question then becomes if it is possible to link the regulatory schemes used to prevent greenwashing to an antitrust policy that becomes more sensitive to sustainability in the environmental sense. In this respect, this paper suggests that the compliance regime of Regulation (EU) 2019/2088 on sustainability‐related disclosures in the financial services (SFDR) could be made instrumental in deciding which agreements can be exempted under a theory of sustainability. The SFDR mandates disclosure for investors that pursue measurable sustainability goals and under the quite tight requirements of Article 9 the goals must be identified and measurable. As a consequence, if a financial entity (for instance, a private equity fund) invests into a target it is very likely that the investee was profiled under the SFDR. If such company enters a technology agreement (as licensor or licensee) the SFDR compliance creates a strong presumption that the company is pursuing a goal that is highly consistent with sustainability and the antitrust treatment could benefit from the presumption.