DESIRA POLICY BRIEF

European Roundwood Traceability

The European Timber Regulation (EUTR) is an instance to consolidate European efforts to halt illegal logging practices. Its aim is to ensure that timber and timber-related products on the European market are legal. When reviewing the current EUTR, the most fundamental needs are common national EUTR-standards amongst countries of the European Union, which currently do not exist. Common standards define the minimum requirement of establishing a more technology-based, unified implementation of the EUTR. In addition, there is a need of a game-changing technology, or a combination of technologies. Currently, no efficient, affordable, easy to use, globally available technology has prevailed or gained majority in usage, which would make traceability of wood simple.
Looking into the future, it is possible to define two potential scenarios of roundwood traceability for Europe, a 'sustainable way' or an 'exploitation way'. The truth most likely lies somewhere in the middle of those two pathways. The question addressed together with Living Lab members was: Will timber traceability move into the limelight as a tentative attempt to cover-up illegal logging practices, or, as a confirmation of legal, sustainable practices?

CONTEXT

Austria has a strict, long-existing forest law guaranteeing sustainability: The word sustainability originates from the domain forestry itself and is defined as guaranteeing more growth than felling. Nevertheless, to fulfil the yearly demand of roundwood, timber is acquired from the European and international market. This poses the threat of placing illegal deforested products on the European market, which is what the European Union Timber Regulation (EUTR) is tackling; illegality is not only defined as cutting down endangered tree species, but also breaching national forestry laws. While forestry is a domain which undergoes and partially has already undergone a process of digitalisation, the level of digitalisation within the implementation of the EUTR is rather low. This led to the definition of the following focal question: "How can digitalisation support and enforce the adoption of the European Timber Regulation (EUTR) concerning imported round wood in Austria?"

The effects of digitalisation concern the availability of information and the way information is exchanged and communicated. Digitalisation allows information to travel faster; generally speaking, transparency counters clandestine activities. Contrarily, an abundance of information needs efficient data filtering, storage and distribution. Forestry is a domain which is experiencing a high degree of technological advancement, only, the institutional circumstances are not there yet, for technological innovation to gain importance when tackling illegal logging.

RESEARCH APPROACH

The activities of this Living Lab evolve around past, current and future efforts to limit illegal timber trade. To elaborate potential future scenarios of timber traceability in Europe, dedicated scenario workshops were held. The focal question of the workshops was: "**What will timber tracking look like in 2031 in Europe?**" This question allows creating a broad context where processes and all relevant specificities can be explored, and where stakeholder's imagination of a future state can be articulated, but it also sets the agenda for the discussion by making a focal point.

DIGITAL TECHNOLOGIES POSE A GLOBAL SOLUTION TO TACKLE ILLEGAL TIMBER TRADE

To describe the entities active in the scenario of wood traceability, we draw back on the concept of the Socio-Cyber-Physical System (SCP). The socio-domain of the SCP is composed of the entities dealing with timber, the countries involved and the supervisory authorities. The cyber-domain includes digital technologies used to perform checks on legality. The physical domain comprises all the elements of the forests and timber. Currently, the SCP can be viewed as a struggle of economic interest versus natural interest (physical domain), with a referee trying to keep things in order.

SCENARIOS DEVELOPED

The two main scenarios developed with LL members are the '**Exploitation scenario'** and the '**Sustainability scenario**'. The notion of the Exploitation pathway follows the idea of making use of the commodity forest in a non-sustainable way. It involves generating a **profit** at the expense of others. In this scenario, **nature is on the decline**. Contrariwise, the idea of the **Sustainability** pathway evolves around the principle of less consumption than **growth**. The core of this scenario represents a sustainable approach to nature, which has a positive impact on the issue of wood tracking.

In the Exploitation scenario, winners are clearly the economic entities looking for raising their profits. The environment experiences increases pressure, resulting in a constant loss of biodiversity. The technological and political drivers of change in this scenario are missing to come to the aid. The last resort for assistance are measures such as the designation of nature conservation zones. The increasing demand is driving **illegality**. One option to halt an increase in illegality is provided by the component of **digital technologies**. External technological advancement could have a positive effect, enabling to lessen the prospect of the negative impacts.

In this second scenario, sustainability is becoming more and more important. This in turn has a positive effect on nature. Driven by the removal of bureaucratic barriers, technology gains momentum, existing technologies are advanced, and new technologies are developed. As a result, forests benefit from this development, as they have more room to thrive and breathe. Companies have to reorient themselves to a certain degree. They must learn to jump on the sustainability bandwagon and make it work for them. This means opportunities as well as challenges; potentially financial challenges for consumers and industry can also be seen as opportunities.

POLICY RELATED DISCUSSION

The European Union Timber Regulation (EUTR) includes due diligence requirements and a prohibition on illegally sourced timber entering the EU market. The EUTR places responsibility on the individual or organisation placing the timber on the market to conduct due diligence, in order to ensure that the timber is in compliance with the laws of the country where it is harvested.

The main barrier for the establishment of a more technology-based EUTR is the lack of national standards and incentives. Without a common denominator, it will not be possible to establish common technology-based practices amongst participating countries of the EUTR.

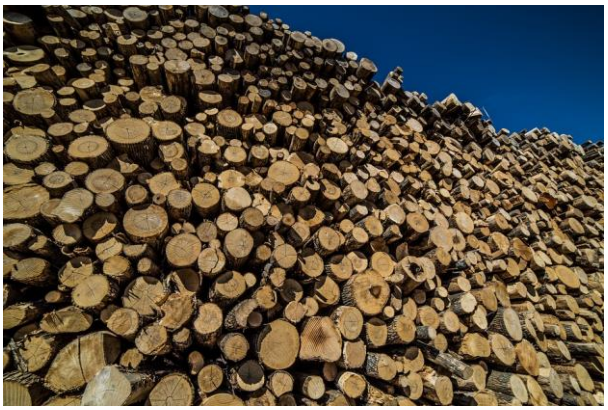
In theory, basic prerequisites already exist: Forestry is a domain which is experiencing a high degree of technological advancement; observational data is abound, technologies to track single objects are on the verge of reaching maturity, connected technologies such as blockchain or Internet of Things (IoT) are gaining importance. Connectivity allows for information to travel fast and wide and only the institutional circumstances are not there yet in order for technological innovation to gain importance.

GLOBALLY APPLICABLE SOLUTIONS NEED TO BE FOUND TO GUARANTEE TRANSPARENT AND EFFICIENT TIMBER TRACEABILITY

A way to circumnavigate this situation could be to generate incentives, rather than punishments; new certificates or quality labels could evolve from wood products which were tracked using digital technologies and hence guarantee legal compliance; and companies, who utilize certain technologies could obtain tax reliefs. Such conditions could even have the potential to drive technical innovation through showcasing good practice.

Action is required not just at the national level, but also at the EU level. Member States should reaffirm their commitment to effectively monitor the EUTR's implementation and to take appropriate measures in the event of violations, such as administrative or criminal actions and sanctions. Instead of being only a declaration of good intentions, the EUTR must be a truly effective tool.

Enforcement is critical to the effectiveness of preventing illegal wood trafficking, especially through the EUTR. Cooperation is a crucial tool for assisting with enforcement. This collaboration can take various forms, with one important area being cooperation between customs administrations in importing and exporting nations, as well as other relevant government agencies. Information gathered through e.g., digital technologies and confirmed on the ground by external parties, such as independent civil society monitors, is also critical.



POLICY OPTIONS

Adaption of the policy regulations concerning the EUTR

- An amendment of the EUTR and a subsequent implementation of the reform could serve to establish national uniform standards and enforce a change of current due-diligence procedures.

Incentives to deploy a more forge-proof due-diligence-system (DDS)

- The current DDS heavily relies on paperwork, which is prone to forgery. Alternatives to verify the origin of wood, e.g., tagging and use of blockchain technologies, would guarantee more effectivity and efficiency in ensuring legality. Incentives could be e.g., stricter policy regulations as well as tax reliefs for voluntary application of digital technologies for traceability.

Technological training

- Commitment of controllers in the responsible authorities who are forestry specialists and/or have a thorough understanding of supply chains, as well as multidisciplinary training sessions with external experts, are regarded as best practice and should be enforced.
- Increased capacity at the national level is needed to provide excellent operator coverage and allow for regular and frequent checks.
- Education efforts should be stepped up to ensure that operators have a better awareness of the EUTR and of their responsibilities.

Foster cooperation within and between countries

- There is a lack of formalised cooperation and timely communication between countries and among officials of the enforcement chain within countries. Setting up exchanges between countries or joint inspections could represent good practices.
- Cross border collaboration and regular exchanges between different authorities involved should be made possible and improved.

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DESIRA POLICY BRIEF

This policy brief is published in the frame of the EU-funded DESIRA project and aims to provide recommendations for policy makers on how to support digitalisation in the context of roundwood traceability in Austria.

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