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A water sustainability framework for assessing biofuel certification schemes: Does European hybrid governance ensure sustainability of palm oil from Indonesia?



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1. Introduction

With the implementation of the 2009 Renewable Energy Directive (RED), the European Union (EU) significantly incentivised the production of biofuels in the transport sector until 2020, and there are plans to continue to promote them in the next decade (European Commission, 2017a). In an effort to ensure the sustainability of biofuel production, the RED introduced an innovative hybrid governance approach in which private entities are responsible for assessing and certifying whether biofuels comply with several criteria (Ponte and Daugbjerg, 2014). Focusing on palm oil from Indonesia, the article examines this approach with reference to the "Normative Power Europe" (NPE) debate and assesses to what extent industry and NGO involvement (hybrid governance) can help EU public actors exercise NPE. While the article confirms earlier findings that Europe as a whole is not acting as a "normative power" with respect to biofuels (Afionis and Stringer, 2012), it also shows that non-governmental organisations (NGOs) promote water sustainability and their participation, which is a matter of controversy (Partzsch, 2011), can help EU public actors exercise NPE. Therefore, by acknowledging a variety of European actors we cannot simply dismiss NPE.

NPE assumes that the EU gives priority to norms, such as human rights and sustainability, rather than economic self-interest in international relations (Afionis and Stringer, 2012; Manners, 2002). We use water as a means of assessing whether the hybrid governance approach promotes sustainable development and thus has the potential for NPE. The Indonesian palm oil sector, which has led to contaminated and depleted water sources, has expanded drastically as a result of European demand, and serves as an excellent focus (Mukherjee and Sovacool, 2014). While NPE generally treats the EU as a black box, grouping all public and private actors together, we link the NPE concept to the literature on biofuel certification, and differentiate three actor groups, which have the potential to influence NPE: public actors, industry and NGOs. We are particularly interested in the participation of NGOs in certification and whether it makes a difference towards NPE, or whether they should stay out of schemes to not legitimize this form of governance (Partzsch, 2011).

Actor differentiation is particularly relevant for EU hybrid biofuel governance. Several EU-approved certification schemes were created by multi-stakeholder organisations, in which public, industry and NGO actors are involved in standard-setting. Others are industry-led schemes, which were developed and are operated solely by members of the biofuel industry. Our analysis focuses on the six EU-approved certification schemes that offer certification for palm oil from Indonesia (European Commission, 2017b). Three are multi-stakeholder schemes – the International Sustainability and Carbon Certification (ISCC), the Roundtable on Sustainable Biomaterials (RSB) and the Roundtable on Sustainable Palm Oil (RSPO) – and three are industry schemes – Grain and Feed Trade Association Trade Assurance Scheme (GTAS), HVO Renewable Diesel Scheme (HVO RD) and RED Bioenergy Sustainability Assurance (RBSA) (see Table 1).

In the following section, we will first introduce the NPE concept and link it to the certification literature, by differentiating between actor groups in the context of water sustainability and outlining the controversy over NGO participation. In the third section, we present the EU biofuel regulation and the certification schemes in more detail. We then derive a water sustainability framework in the fourth section. The framework contains six criteria and 14 indicators, which allow us to code and assess the principles and

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Overview of certification schemes.

Scheme	Туре	Initiator	Timing	Feedstock
Grain and Feed Trade Association Trade Assurance Scheme (GTAS)	Industry	Grain and Feed Trade Association	Initiated prior RED Operational in 2005	Palm Oil and others
HVO Renewable Diesel Scheme (HVO RD)	Industry	Neste Oil	RED-approved in 2014 Initiated after RED Operational in 2014 RED-approved in 2014	Palm Oil and others
International Sustainability and Carbon Certification (ISCC)	Multi-Stakeholder	Meo Carbon Solutions Consulting	Initiated prior to RED Operational in 2011 RED-approved in 2011	All
RED Bioenergy Sustainability Assurance Scheme (RBSA)	Industry	Abengoa Bioenergy	Initiated after RED Operational in 2011 RED-approved in 2011	All
Roundtable on Sustainable Biomaterials (RSB)	Multi-Stakeholder	Various; hosted by the Swiss Federal Institute of Technology in Lausanne	Initiated prior to RED Operational in 2011 RED-approved in 2011	All
Roundtable on Sustainable Palm Oil (RSPO)	Multi-Stakeholder	WWF with Aarhus United, Migros, MPOA & Unilever, among others	Initiated prior to RED Operational in 2010 RED-approved in 2012	Palm Oil

Sources: Homepages of certification schemes, European Commission (2017b).

criteria of the six palm oil certification schemes. The results, based on an assessment of the schemes' criteria and 15 semi-structured interviews, are outlined in section five. We found that NGOs are responsible for strengthening criteria with regard to water sustainability. However, the focus on water sustainability demonstrates that the EU is operating under a limited definition of sustainable development, which tends to concentrate on climate mitigation. We therefore conclude that while the EU, as a whole, is not acting as a normative power, certain actors push for stronger normative power, and NPE is more likely to be exercised, if NGOs are involved in European hybrid governance.

2. Normative power Europe and water sustainability

Norms define what is considered appropriate behaviour in the international community. Manners (2002) coined the term "normative power" to describe the EU's power to "shape conceptions of normal" (p. 239) and "define what passes for normal" in international relations (p. 253). He argues that the EU's specific history "pre-disposes it to act in a normative way" (Manners, 2002, p. 242) based on norms such as democracy, rule of law, social solidarity and human rights. The NPE concept implies that the spread of universal norms, such as sustainability, takes precedence over self-interested geopolitical expansion in foreign policy. In this sense, the EU is not seeking power as traditional powers would, but instead taking on the role of international promoter of universal norms (Manners, 2002).

While Manners has treated the EU as a single actor, with the hybrid governance approach, the EU has effectively delegated sustainability compliance to a variety of non-state actors. Linking the NPE concept to the literature on biofuel certification, we therefore contend that, in the case of the EU biofuel policy, a variety of different actors have the potential to influence normative power. The European Commission, which is responsible for monitoring and reporting associated with the RED as well as approving the certification schemes, is a key public actor, along with the European Parliament and the European Council, which are responsible for bringing the directive into force (European Parliament, 2009). A second actor group is industry. Biofuel policies such as the RED have led to the development of a biofuel industry which receives approximately 5.5–6.9 billion EUR/yr in subsidies (Bourguignon, 2015). The third actor group is NGOs, which have often been considered a counterpart to industry actors, "play[ing] an important role of 'question[ing] and act[ing] as the green lobby''' (Lin, 2012, p. 26). Some NGOs, such as the World Wildlife Fund (WWF), are participating in certification schemes in order to ensure that biofuels can act as a sustainable alternative to fossil fuels. However, it is controversial whether their participation matters, or whether they only serve to 'greenwash' biofuels (Lin, 2012). Some NGOs therefore refuse to participate in palm oil certification, and have generally lobbied against biofuels (Partzsch, 2011). NGOs which challenge biofuels point to the food vs. fuel debate, that blames biofuel demand for increased food prices (Schlamann et al., 2013). Indirect land-use change (ILUC), which occurs when biofuel cropland displaces other cropland, has been shown to substantially increase greenhouse gas (GHG) emissions for many biofuels, including palm oil from Indonesia (Bourguignon, 2015).

Similar to most NGOs, Afionis and Stringer (2012), who apply the NPE concept to EU biofuels regulation, clearly prioritise sustainability over free trade: "There is a need for development that takes into account the social needs of the population, the imperativeness of protecting the environment and conserving natural recourses, whilst also ensuring stable levels of economic growth and employment" (p. 117). By opposing specific 'good' norms in favour of interests based on supposedly inferior norms, the scholars themselves participate in "writing norms" (Engelkamp and Glaab, 2015). The article concludes that the EU is prioritising trade competitiveness and economic growth, and hence European economic interests, over sustainable development and interests associated with sustainability (Afionis and Stringer, 2012).

By studying water sustainability, we partake in this normative endeavour while considering an aspect of sustainability beyond climate mitigation. We selected Indonesia as an illustrative case because the EU has become one of the largest markets for Indonesia palm oil (Mukherjee and Sovacool, 2014), accounting for an estimated 23% of the European biodiesel imports (European Parliament, 2017). Approximately 5165 L of water are required for the production of 1 L of palm oil-based biodiesel in Indonesia (Mekonnen and Hoekstra, 2011). A 2013 report commissioned by the European Commission found that an increase in bioenergy poses the risk of shifting water problems to third countries, in particular, regarding palm oil production in Indonesia and Malaysia (Diaz-Chavez et al., 2013). There have been several grievances filed in Indonesia about toxins in drinking water, and drying up of wells and community land next to plantations (Larsen et al., 2014). Where land rights are not clear, land is often purchased in an effort

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