Chapter 2
HyLaw or Hydrogen Law: A Regulation for Removal of Legal Barriers to the Deployment of Fuel Cells and Hydrogen Applications

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ABSTRACT

In recent years, hydrogen technology has been at the forefront of environmental discussions to meet increasingly tough climate protection goals and particularly low emissions targets in the transportation sector. Like any major change, a transition to hydrogen energy faced challenges in many countries, which caused several problems in the growth of the hydrogen share of the total energy supply portfolio. In 2018, Hydrogen Law (Hylaw) was introduced, which removes the legal barriers to the deployment of fuel cells and hydrogen applications. It is a flagship project aimed at boosting the market uptake of hydrogen and fuel cell technologies providing market developers with a clear view of the applicable regulations while calling policymakers' attention to legal barriers to be removed. This chapter introduces a consistent framework for the Hylaw regulations that makes is a clear and precise statement and an interconnection between law and energy management policies.

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INTRODUCTION

A consensus is fast emerging that hydrogen will play a key role as an energy vector and a pillar in the ongoing energy transition. It promises to accelerate transformative changes across many sectors, most notably energy and transport. This chapter draws together some of the most experienced global energy experts' insight to provide a timely and insightful perspective on how hydrogen projects may proceed and the sector develops worldwide (Abánades et al., 2013; Abbasi & Abbasi, 2011).

Energy lawyers are accustomed to the emergence of new technologies(Ajanovic, 2008; Alazemi & Andrews, 2015). Nevertheless, each emergent technology's unique characteristics need to be respected. It would be complacent to think that hydrogen can be treated like natural gas or other energy sources for legal and regulatory frameworks, investment cases, financing structures, operational requirements, revenue stream arrangements, and the panoply of other elements that need to be considered to formulate an effective commercialization model (Andress et al., 2009; Arnason & Sigfusson, 2000).

The term "hydrogen economy" is not new, but the role that hydrogen can, and is expected, to play in the economies of many of the jurisdictions covered in this chapter demonstrates the revitalized ambitions of this subsector. But this chapter also highlights the fact that progress is not equal in all places. An emerging suite of technologies and an immature web of policy and regulatory frameworks in some jurisdictions are developing quickly into a supportive system ready to welcome private sector investment in other countries. What is clear is that the promise of hydrogen developments and uses is rapidly evolving as governments and market players are waking up to its benefits and potential. With many countries committing to having major low-carbon hydrogen projects underway by 2030 and committing to achieving net-zero targets, investors have to take a truly global perspective on the sector (Baker, 1980; Balat, 2008). This chapter sets out the ease (or otherwise) of developing hydrogen projects across the jurisdictions covered – highlighting the status of hydrogen developments in each country; considering the market prospects and opportunities ahead that are key for our clients who are seeking to enter or expand in this sector; what challenges need to be overcome to reach national and international goals and how the national and international specific legislation and regulations in each jurisdiction facilitate this growing sector (Ball & Weeda, 2015).

Environmental Policy

Supranational policies and frameworks helpfully chapter the longer-term direction and developments at national levels. In this case, the supranational commitment is made through the Paris Agreement by 189 countries, representing 97% of global

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