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Legitimizing the International Energy Agency (IEA):

An Authoritative Voice on Global Energy Policy

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The perception of legitimacy matters, because, in democratic area, multilateral institutions will only thrive if they are viewed as legitimate by democratic publics.

(Buchanan & Keohane, 2006)

Preface

I love story telling. I also love putting complex parts of a puzzle together and suddenly see the picture far more clearly. This is what this master's project has been all about. It is about allowing the history to be part of the explanation, as well as allowing the societal context to complete the picture. As I first sat down starting to plan this master project, the world was facing a devastating pandemic that immobilized the world and revealed our interconnectedness and interdependence. The covid-19 pandemics has not only caused enormous amounts of deaths and put shocks through the entire world economy - it has also challenged the way we think about global leadership and the work of international authorities in times of crisis.

From the early days of the pandemics, then-US President Donald Trump showed his dissatisfaction to one of the greatest international authorities when he abandoned the World Health Organization (WHO), an organization the United States helped establish half a century ago. Trump accused the WHO of being a "puppet of China" and allowing the covid-19 to "spin out of control" at the cost of "many lives" ("Puppet of China," 2020).

It is still too early to say what impact the covid-19 pandemic has had on international authority in the global governance system. While the WHO has been challenged and contested on several occasions for the past year and a half, it seems like other international authorities have managed to stay out of the line of fire. In the midst of the crisis, the International Energy Agency (IEA) has stepped up to its leadership as an international authority worth observing, and is urging governments all over the world to use this historic and once-in-a-lifetime opportunity to transition to clean energy and prepare for a less carbon-intensive future. From the sideline, I have observed how the current global energy discourse in times of crisis is shaping new policies all over the world. One and a half year into the pandemic, sustainable energy transition is on the top of the global energy agenda, but the governments are lagging behind in fulfilling their commitments. The possibility of a principal international authority within global energy governance is more relevant than ever, but will the IEA be up for the task?

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husband who has been a fantastic support and gone above and beyond to make daily life as

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This Master's thesis marks the end of five great years at the Faculty of Social Sciences at the

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Marie L. Ljones

26. juni 2021

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Abstract

When an international organization gains authority and becomes more prominent in the public sphere, contestation rise and the need to legitimize its exercise of authority grows. Although legitimation processes of international organizations is a topic of growing interest, very few scholars have done a detailed study on the legitimation process employed by an epistemic IO authority in the global governance system. The aim of this study is to investigate how an epistemic IO authority such as the International Energy Agency (IEA) legitimize its authority in the global governance system despite inherent legitimation issues. To answer the specific research questions, I have performed two separate analysis. First, a qualitative in-depth analysis of the IEA to reveal how institutional qualities of the IEA can shape legitimacy beliefs towards the organization. Next, a combined quantitative/qualitative media content analysis to learn more about the role of media in IEA's legitimation process during the last ten years. Data was obtained from one center-left and one center-right quality newspaper in three IEA member countries. The results showed that the IEA has been actively engaged in legitimation processes at many levels, using various institutional sources of legitimation that are linked to the technocratic narrative. The results also revealed that there has been very little criticism of the IEA in the media during the selected ten-year period. These results suggest that the IEA might have succeeded in becoming a trusted IO authority and therefore managed to curb contestation. Another plausible explanation might be that the world has become so complex these past decades that we recognize the limits of rationality and therefore also realize the need for epistemic expert organizations such as the IEA.

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List of Abbreviations

EC European Community (EC)

IEA International Energy Agency

IOs International Organizations

IR International Relations

IRENA International Renewable Energy Agency

OECD Organization for Economic Co-operation and Development

OPEC Organization of the Petroleum Exporting Countries

SDG7 Sustainable Development Goal 7

SDGs Sustainable Development Goals

SEforAll Sustainable Energy for All

WB World Bank

WEO World Energy Outlook

1 Introduction

In 2015, the UN adopted seventeen global sustainable development goals as part of the 2030 Agenda for Sustainable Development. This included a unique goal on energy (SDG7) stating the need to "ensure access to affordable, reliable, sustainable and modern energy for all" by 2030. With the signing of Agenda 2030, energy was once and for all established as a "global common good" in need of governance, despite inherent geopolitical issues that makes energy an especially sensitive commodity to govern. SDG7 opened for a new type of dialogue within the global energy governance system and paved the way for new interactions, norms and actors in the field. In 2017, the International Energy Agency (IEA) was trusted with a great responsibility as "custodian agency" responsible for tracking the progress on SDG7 together with four other international organizations. This new mandate has put the IEA on the map as one of the leading actors in a new energy regime built on the foundation of global cooperation. As custodian agency, the IEA has gained a strong position to influence the global dialogue on energy issues in line with its own ideas and expertise. This ability to influence global energy policy has become even more prominent during the covid-19 pandemic.

On the other hand, the IEA faces several institutional and organizational challenges. The organization was designed to enable the major energy consuming countries of the West to coordinate a collective response to the oil crisis in the early 70s, as well as future disruptions in oil supply (*History of the IEA*) (Scott, 2004b). As a subsidiary of the OECD, the IEA is built on OECD's strict membership criteria and the basic idea of economic growth as the most important overall objective. With this dubious foundation that deviates from democratic standards of legitimation, the organization must find other ways to legitimize its exercise of authority by the means of other legitimation narratives.

The overall research agenda for this master's project is to investigate how an epistemic organization such as the IEA has managed to become an authoritative voice on global energy policy despite inherent legitimation problems. More precisely, I will be studying the legitimation process employed by the IEA to nurture the belief that its authority is appropriately exercised. The explanation must be seen in context with the emergence of our modern global governance system and the contemporary societal context.

To answer the selected research questions, I have chosen exploratory case design with two separate levels of analysis. First, a qualitative in-depth analysis revealing institutional features of my chosen unit of analysis (the IEA), and second, a combined quantitative/qualitative media content analysis that maps the legitimation process as it is presented in media. This project emphasizes on the relationship between authority and legitimacy and will add new knowledge to the study of legitimacy and legitimation of international organizations.

1.1 Research Questions and Delineation

The main goal of this thesis is to explore how the International Energy Agency (IEA) legitimizes its exercise of authority in the global governance system despite institutionalized legitimacy issues. Based on this overall goal I have derived the following research questions.

- 1. In what ways does the IEA legitimize its exercise of authority in the global energy governance system?
- 2. To what degree is there coherence between the legitimation narrative the IEA has constructed and that which is actually communicated via media?

The first research question touches upon the close link between authority and legitimacy which is at the core of the global governance theory employed in this thesis. The general assumption is that institutions exercising authority need to engage in legitimation processes to nurture the belief that its authority is appropriately exercised (Zürn, 2018, p. 89). The second research questions points to the media as a possible contributor in disseminate the IEA's constructed legitimation narrative. The question is meant to capture the difference between intention (the IEA's constructed narrative) and reality (what happens in reality as a result of media dissemination).

This project will not address legitimacy beliefs in terms of measuring what people really believe about the IEA. My focus will be on the *legitimation process* employed by the IEA as part of its strategy to shape such beliefs.

1.2 Relevance and Originality

Much work remains before we can fully understand the political processes underlying the global (energy) governance system and why different nations to a greater or lesser degree oppose to be governed by international authorities. In recent years, we have seen how international organizations (IOs) have been trusted substantially enlarged authority, justified by the fact that increased transnational political challenges require cooperation and global governance.

What will make my master's project *relevant* is the way I will treat energy as a global common good that needs to be governed in the same way as other transnational issues such as trade, health, and the environment. The idea of global energy governance is still a novel thought in many countries, that being western industrialized countries, eastern oil-producing countries or developing countries. This approach gives me the opportunity to connect my master's project to one of the most heated societal and political debates of our time.

Denscombe suggests that a study might be considered *original* if it makes a new contribution in one or more of the following areas: topic, method, data or analysis (Denscombe, 2002; White, 2009, p. 19). What will make my master's thesis *original* is that I will use Zürn's global governance theory from 2018 in combination with Tallberg and Zürns analytical framework presented in the journal "Review of International Organizations" in 2019, when I analyze my chosen case. The analytical framework theorizes the relationship between institutional features of IOs, legitimation processes, and legitimacy beliefs of audiences (see section 3.3). Similar studies have been done on political international authorities such as the EU, UN and WTO, but to my knowledge, this has still not been done on an epistemic IO authority such as the IEA.

1.3 Disposition

This thesis started with an introduction to the main topic of legitimacy and legitimation of international organizations in the global energy governance system, followed by a presentation of the research questions. Then I briefly accounted for relevance, originality and provided a link to the global domain of energy policy. In chapter 2, I will move on to describing important transitions of the 21st century that have impacted the development of the modern global energy governance system. In chapter 3, I will present the chosen

theoretical framework as well as the analytical framework on which the analysis will be based. The background concepts "legitimacy" and "legitimation" will here be conceptualized to more specific systematized concepts which enable me to study the phenomena of legitimation processes in the context of an international organization. In chapter 4, underlying methodological choices and considerations will be elaborated on. This includes description of methods for retrieving empirical data, data analysis and assessment of data quality. Chapter 5 and 6 contain the two-level empirical analyses, while chapter 7 provides a discussion of the main findings. The last part of this master's thesis is a concluding chapter where the most important findings and implications will be highlighted, as well as ideas for further research.

2 Context

Our current global energy governance system must be understood in context of important political transitions in the 21st century. In the following sections, I will explain three important developments that have significantly impacted the architecture of today's global (energy) governance system; 1) the development of international authority beyond the nation state which is important because it has opened new doors of opportunities for epistemic organizations such as the IEA to exercise global authority, 2) the emergence of the modern global governance system which is important because it outlines the new global "space" where the IEA exercises its authority, and 3) the raise of energy as a global common good, embodied in the UN Sustainable Development Goals – SDG7. This third contextual development is important because it leads us directly to the current window of opportunity for the IEA to increase its authority in the global governance system as custodian agency for tracking the progress on SDG7. Thus, it provides a link between past and present.

2.1 Historical Development of International Authority

The growth of international authority by international institutions is an ongoing process (Zürn, 2018, p. 109) Nevertheless, we can identify two distinct growth phases: 1) The post-Second World War period between 1945 and 1970, and 2) The post-Cold War period from 1990 and onwards (Zürn, 2018, pp. 111, 123)

Traditionally, states were not subject to any external authority and were regarded as the only institutions executing international authority (Voelsen & Schettler, 2019, p. 540; Zürn, 2018, p. 35). This has to do with the old Westphalian principle claiming that each state has exclusive sovereignty over its own territory. When IOs were introduced in the global community after the Second World War they were primarily established as instruments of powerful states to coordinate national policies within specific policy areas (Zürn, 2018, p. 35) as well as to secure a democratic welfare state that sometimes required a certain international environment to flourish (Katzenstein, 1985; Zürn, 2018, p. 113). This development of international authority was part of a globalization process that gained momentum in the postwar area. Prior to this development, states were rarely asked to implement decisions that were not agreed upon by the traditional consent principle dating back to the Westphalian peace treaty of 1649.

When the second wave of IO establishment came in the 90s (Zapp, 2018, p. 8), the international community looked very different. Some well-established organizations such as the IMF, WB, and the UN had gradually reinforced and strengthened its position in recent decades and become remarkably influential throughout the world. The consent principle was still prevailing in theory, but majority decisions became more and more prominent and resulted in situations where some member states were asked to implement decisions that they did not agree upon (Zürn, 2018, p. 35). In the outskirts of these large intergovernmental organizations (IGOs), other institutions appeared in every sector, some subordinated to a parent organization, while others were established as autonomous organizations pursuing its own agenda, e.g. non-governmental organizations (NGOs). Due to the decay in national sovereignty, international institutions were now both able and expected to exercise authority in the new world society (Zürn, 2018, p. 35).

The move from traditional constitutional rule to more loosely coupled spheres of authority in the global governance system has resulted in lack of coordination both within and between sectors. It has also resulted in international authorities escaping democratic control. The new international set-up is characterized by fragmentation of authority, and by continuous efforts to legitimize the exercise of authority (Zürn, 2017, p. 261). The possibility of international authority which I have explained in this section is one of the main features in the modern global governance system.

2.2The Emergence of Global (Energy) Governance

The globalization process in the postwar area shaped strategic interactions between people, communities, institutions, and societies that had not previously been connected (Heywood, 2015, p. 100). In the absence of a global government, global governance assumed the role of directing the globalization process and designing a new world politics.

Zürn uses the four historical-institutional concepts external shocks, critical junctures, self-reinforcing path-dependence and reactive sequences to explain how the modern global governance system emerged (Zürn, 2018, p. 110). The end of the Second World War was the first of two external shocks paving the way for a radical system change. The subsequent choice of "embedded liberalism" and collective security are examples of critical junctures shaping a new institutional design of the political system. Embedded liberalism can be described as a commitment to a form of institutionalized liberal multilateralism¹ (Helleiner, 2019, p. 1113). Basically, the old idea of an isolationist stand was abandoned for the benefit of a much more open world order under American leadership (Zürn, 2018, p. 113). The main focus was to create a system that facilitated free trade and open borders, secured and embedded in national political systems that were meant to "absorb the shocks" of inequalities triggered by the global market (Ruggie, 1983; Zürn, 2018, p. 113). Instead, selfreinforcing mechanisms led to the newly established institutional system being further strengthened at the expense of national sovereignty (Zürn, 2018, p. 117). The Bretton Woods institutions were by far the most successful and influential institutions in the postwar area. They promoted an integrated market economy and placed themselves at the very center of a new trade regime.

What happened next can be explained in a series of reactive sequences: The strengthening (or deepening) of liberal international institutions and post-war regimes undermined the concept of embedded liberalism by weakening its own shock absorbers (Zürn, 2018, p. 134). Resistance against neoliberalism in turn pushed states to accept not only market-making, but also market-breaking international institutions (Zürn, 2018, pp. 134-135), the latter to provide norms and some degree of social justice the system. The end of the Cold War was the second external shock paving the way for the modern global governance system. The fall of the Iron Curtain between the East and the West created a

¹ Multilateralism is defined in section 3.2.2

new critical juncture by releasing the dynamics of functional differentiation in world politics (Zürn, 2018, p. 123). The collapse of communism had major ripple effects for the European Union in particular. Many East European countries immediately applied for membership in the European Union to secure its own economy, and to become independent from Russia. Becoming an EU member required severe national adaptations, especially for countries that had been subject to communist rule (Zürn, 2018, p. 124). All members had to be democratic, accept human rights, operate in the free market, and be willing to adopt the entire body of EU law (Zürn, 2018, p. 124). The post-Cold War enlargement of the EU led to enormous processes of liberalization in these countries and has later been described as the most successful case of external intervention into domestic affairs in recent history (Zürn, 2018, p. 124).

The following years, the world society experienced a continuous push towards more globalization, more multilateralism, and more interconnectedness. Leaders of the West ceased this opportunity and made some crucial decisions towards global integration that eventually allowed the modern global governance system to emerge (Zürn, 2018, pp. 121-122). But the energy sector lagged behind most other sectors to arrive at the global scene. Although scholars such as Keohane did some studies om "international energy cooperation" back in the 80s (Keohane, 1984), the label of "Global energy governance" is a relatively new phenomenon and was barely mentioned in the global discourse before 2015 (Karlsson-Vinkhuyzen, 2015, p. 119). The main challenge was, and still is, that energy is closely linked with geopolitical, economic, and environmental considerations and that different states have different understandings of how to best approach this complex and interconnected policy domain.

In my bachelor's thesis, I showed that the very thought of global cooperation within energy never had a high priority among most nation states. The reluctance can be explained by the close association between energy and national security. For most of the 20th century, the state and its *economic* and *military* security was at the center of concern, and energy was a crucial element in both these dimensions (Karlsson-Vinkhuyzen, 2015, p. 123). A common assumption, and perhaps *the* most widely used argument *against* global energy governance, was the idea that energy governance was a zero-sum game where one country's energy security led to another country's lack of it (Goldthau & Witte, 2009, p. 373; Van de Graaf & Colgan, 2016, p. 2). Today, most countries recognize some level of global

energy governance, and energy has become perhaps *the* most important commodity of trade.

2.3 Building up to SDG7

The limited attention to energy cooperation from world leaders and decision makers is reflected in scarce literature on the topic and an almost complete lack of global regulations on energy issues until recently. The great turning point came in 2015, when the United Nations Sustainable Development Summit (COP21²) was arranged in Paris. For the first time in history we had a global agreement that promoted energy as a global common good in need of global governance. But how did energy end up as one of the sustainable development goals, and who pulled the strings?

In September 2011, former UN Secretary-General Ban Ki-moon launched the Sustainable initiative Energy for All (SEforALL) (*SEforALL: Who we are*). The plan was to mobilize different actors to act in accordance with the three main objectives: 1) Ensure universal access to modern energy services; 2) Doubling of the share of renewable energy in the global energy mix; and 3) Doubling the global rate of improvement of energy efficiency (IEA et al., 2019). The wording alone is enough to understand that these three goals were the precursors of today's SDG7: *Ensure access to affordable, reliable, sustainable and modern energy for all,* supplemented by the three targets: Target 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services; Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix; and Target 7.3: By 2030, double the global rate of improvement in energy efficiency.

In 2013, a new multi-agency study, led by the World Bank and the IEA, was presented at the Vienna Energy Forum. The study resulted in "The Global Tracking Framework Report" and charted a new course to achieve universal energy access, double the use of renewable energy, and improve energy efficiency (*SE4ALL Global Tracking Framework*). This report was the first of a series to monitor progress towards the three objectives of the SeforAll. This joint effort of the UN, the World Bank and the IEA was supported by more than 20 partner agencies, including WHO, IRENA and UNSD that have later on been assigned coresponsibility as «custodian agencies» of the SDG 7 indicators (IEA et al., 2019). As we see

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² Conference of the Parties.

from this short historical flashback, the UN has once again stood behind the scenes and pulled the strings as they did in the 70s when they "gathered the troops" in favor of global cooperation within environmental issues. The World Bank is, as always, an important financial facilitator, and the IEA seems to have played an active role in providing expertise leading to the specific wording of both SEforALL and SDG7.

Together, the three historical events in this context chapter have helped us understand how a new international set-up, consisting of loosely coupled spheres of authority, has paved the way for organizations such as the IEA to influence global energy policy without necessarily having to resort to democratic standards to legitimize its exercise of authority.

3 Theory and Concepts

One of my main priorities when working on this thesis was to find a theoretical framework that could handle the complex exercise of authority, by international organizations, that takes place at the global level. The literature on international authorities has gained momentum in recent years, but very few studies deal with the form of authority exercised by an epistemic "knowledge producing" authority such as the IEA. For this reason, I consider a systematic conceptual account of my chosen theoretical framework to be a fundamental element of this thesis. Had I chosen to take "theoretical shortcuts", I could easily end up building and performing an unreliabel analysis which serves no other purpose than adding complexity to an already complex and occacionally divergent background literature.

3.1Theoretical Framework

To be able to embrace the complexity described above, I have moved beyond traditional professional disciplines in search for a more comprehensive approach. I find Michael Zürn's global governance theory from 2018³ especially interessting in this aspect, as he balances his framework between traditional governing structures and more novel forms of authority that are present in the modern global governance system. Zürn's new theory has been well

³ Zürn, M. (2018). *A Theory of Global Governance: Authority, Legitimacy, and Contestation*. Oxford University Press. https://doi.org/10.1093/oso/9780198819974.001.0001

received in the scientific community, and several new legitimacy studies are based on this theoretical contribution.

I also find Jonas Tallberg's many studies on legitimation of international authorities most useful when searching to account for *IO* legitimacy and legitimation processes. In 2019, these two scholars launched an analytical framework focusing on legitimacy and legitimation processes of IOs in the global governance system. Their focus on international organizations coincides well with my interest in the IEA and the organization's increasing authority. As a theoretical framework supporting my chosen research agenda I have therefore chosen to lean on Zürn's global governance theory in combination with elements from Tallberg and Zürns analytical framework⁴.

Zürn's global governance theory is based on the three theoretical building blocks: 1) the notion of a functional and differentiated global political system that differs from other subsystems in world politics (e.g. economics), 2) Weber's dominance sociology adapted to the global governance system, and 3) historical institutionalism where concepts such as path dependence, self-reinforcing dynamics, and self-undermining processes are central (Zürn, 2018, p. 14). The main argument is that *features of the current global governance system have endogenously produced contestation of international authorities (Zürn, 2018, p. 11)*. In times of conflict or crisis, global tensions escalate and often result in a demand for change. This might in turn lead to turbulence and opportunities for "gridlock" and *decline* in global governance. Another outcome is that international tensions and crisis can lead to institutional re-legitimation and a *deepening* of global governance.

In metatheoretical terms, Zürn's theory is based on "scientific realism" (ref Putnam 1966, 1981) which aims to produce true descriptions of the world consisting of both observable and unobservable aspect (Zürn, 2018, p. 14). Scientific realism shares perceptions with critical rationalism that reality exists outside our personal assumptions. Nevertheless, it acknowledges unobservable aspects such as norms and normative principals. The idea is that these "unobservables" must be associated with reality in order to get a holistic picture and understand how empirical correlations are produced (Zürn, 2018, p. 16).

⁴ Tallberg, Jonas, & Zürn, Michael. (2019). The legitimacy and legitimation of international organizations: introduction and framework. *Review of International Organizations*, *14*(4), 581–606. https://doi.org/10.1007/s11558-018-9330-7

3.1.1 Concepts Related to the Global Governance Model

In this section, I will start by reasoning around the broad concept of global governance which is the overarching theme of this thesis. Afterwards, I will highlight underlying concepts that will be useful when analyzing different aspects of the global energy governance system in the forthcoming analyses.

Global Governance

Although the literature on global governance has grown significantly in recent years, there is still great disagreement, both within and across academic groups, as to how the concept should be defined. In this master' thesis, global governance is understood as the way global affairs are managed in the absence of a global government. According to Zürn, global governance is more than the sum of institutions that produce regulations within certain policy domains. It is also about the interaction between these institutions and how they are grounded in a normative order (Zürn, 2018, p. 3). Based on this understanding, Zürn has developed a new definition of global governance. His definition is intended to address the critics who consider earlier definitions to be elusive, technocratic, or associated with neoliberalism and Western interests (Zürn, 2018, p. 5).

Global Governance refers to the exercise of authority <u>across national borders</u> as well as <u>agreed norms and rules</u> outside the nation state, both <u>justified on the basis of common goods</u> or transnational problems (Zürn, 2018, pp. 3-4).

The history shows us that several actors in the global governance system have not necessarily been given authority democratically. Yet, some of these actors have considerable power in world politics today. This means that the system has a precarious legitimation problem which might seem disturbing considering legitimacy is essential to the maintenance of any political system. Unlike the democratic institutional system, the global governance system has not incorporated accountability mechanisms where one can give power to or take power from decision makers (Scholte, 2011, p. 23). Thus, actors' actions are not always considered legitimate by those who are exposed to them. This leads us to the underlying concepts of global governance: *normative principles, authority*, and *legitimacy*.

Normative Principles

The global governance system rests on three *normative principles* constraining old Westphalian thoughts on national sovereignty and anarchy (Zürn, 2018, p. 36). The principles ensure that the exercise of authority remains justified in the global governance system and build on a common understanding that each state must recognize that there is a form of normativity that transcends exclusive sovereignty.

The first principle points to the assumption that there is a global common good, ascribed to communities beyond the nation state or national societies (Zürn, 2018, p. 27). The most striking in this phrasing is that common goods (often referred to as collective gains) are used as reference unit. This leads us toward a political mindset where joint ventures take precedence over the interests of single members, such as nation states. The second principle refers to an inscription of individual rights and societal entitlements of non-state actors as part of the normative structure of world politics (Zürn, 2018, p. 30). The central element in this principle is that states are expected to recognize and institutionalize at least some level of individual rights and protection if they wish to appear as legitimate actors in the system (Zürn, 2018, p. 35). The third principle refers to the possibility of international authority as discussed in chapter 2. So, assuming that there is a global common good and built-in acceptance of individual rights – then there is also a need for international public authorities that can identify, substantiate, and monitor these new norms and rules that basically foster common good and entitlements of actors other than states (Zürn, 2018, p. 34).

Authority

In addition to normative principles, a global political system needs institutions that produce governance (Zürn, 2018, p. 37). This leads us to "authority" as the second key concept in Zürn's global governance theory. In its broadest sense, authority is a form of power and the means through which one actor can influence the behavior of another (Heywood, 2015, p. 119). What this conceptualization so clearly demonstrates is that authority is a relational concept, involving both a governor and someone being governed.

This underlying relational assumption lies at the root of many well-known conceptualizations of authority and coincides with Weber's view of authority as "legitimate"

power". Legitimate power assures cooperation and unfolds in situations where one actor recognizes another actors' commands as legitimate, and correspondingly obey these commands out of duty. Weber's well-known (three folded) conceptualization of authority is best understood in the context of a strong and dominating nation-state as well as hierarchical power relations. This traditional view originates from Westphalian ideas which still had a stronghold in the literature in the 60s. Weber claimed that all governments that are being obeyed, voluntarily or by force, can be said to exercise authority (Weber et al., 1978).

Zürn has a somewhat different understanding of authority, one that separates power from authority which might be more accurate in today's world politics. He claims that authority is neither based on persuasion nor coercion but on *the voluntary recognition of the superordinate by the subordinate*. In line with this conceptualization, authority is based on "the right to rule" instead of "the right to command" and brings about compliance through moral obligations (Heywood, 2015, p. 118).

According to the global governance theory, authority is largely carried out in a reflexive manner in the modern global governance system. Zürn has therefor developed a multi-component conception of public authority consisting of reflexivity and request grounded on an epistemic foundation (Zürn, 2018, p. 45). The conception builds on a "logic of action", much different than the "logic of consequentiality" or the "logic of appropriateness" which has dominated academic thinking about cooperation and institutions in recent decades. The logic of action does not depend on the quality of a specific argument or the manipulation of the subordinate's preferences, but of the recognition of an authority worth observing (Zürn, 2018, p. 45). I will explain the three components of the conceptualization below:

• The *reflexivity* element in the concept is two folded. First, it encompasses an element of *enduring reflection about the worthiness of the authority*. We generally choose to trust the knowledge provided to us by an authority if we know that its reputation and credentials are continuously monitored. Second, the recognition of an authority stems from *reflection about the limits of rationality* (Zürn, 2018, p. 46). It is often in complex cases, where there are no predefined interests and we acknowledge our own limitations, that reflexive authorities unfold.

- Furthermore, reflexive authorities depend on an epistemic foundation and emphasizes the role of knowledge orders as constitutive background of authority relationships and deference (Zürn, 2018, p. 46). Science and expertise have grown in importance in recent years in world politics and is a crucial source to decision making within all sectors of global governance.
- Finally, the modern global governance system is less about command and more about request. Requests can come either indirectly in the form of behavioral implications of interpretations, or directly, in the form of demands (Zürn, 2018, p. 47). Reflexive authorities request certain actions to take place by making the subordinate believe in the benefit of the action and trust the judgement of the authority. This is a situation very well demonstrated by the Paris Agreement⁵, where reflexive authorities are urging but not commanding governments to act.

Zürn goes one step further in his conceptualization of public international authorities and identifies two subgroups of reflexive authorities that dominate the global governance system; 1) *political authority* which basically concerns authority to make decisions in order to promote the common good and to prevent chaos (e.g. the UNSC and the ICC), and 2) *epistemic authority* concerning the authority to make interpretations grounded in expert knowledge and moral integrity.

Inter- and transnational authorities normally come in the shape of epistemic authorities that produce interpretations with behavioral implications. It is, however, important to keep in mind that this theoretical conceptualization is a simplification of reality. In the real world, epistemic authority can in some cases have political implications, or become politicized over time (Voelsen & Schettler, 2019, p. 545). A special group of international authority called "politically assigned epistemic authority" (PAEA) ⁶ are examples of this.

⁶ A specific subgroup of epistemic authority has become more and more prominent in the global governance system in recent years; namely Politically Assigned Epistemic Authority (PAEA). PAEAs are institutionalized organizational bodies that have been delegated mandate and competence by other authorities to gather and interpret politically relevant information, facts and norms. (Zürn, 2018, 8/52). Although their requests are not binding, disregarding them may be consequential. A good example of a PAEA is the International Panel of Climate Change (IPCC), which regularly collaborates with the IEA. The United Nation does not have an equal body to the IPCC concerned within energy issues. Some claim that the IEA should step up and take this place.

⁵ Legally binding international treaty on climate change.

Legitimacy and Related Concepts

There is no easy way to define legitimacy due to a wide range of diverging theoretical directions and applications. Heywood argues that legitimacy is crucial for the distinction between power and authority and suggests that legitimacy is "the quality that transforms naked power into rightful authority" (Heywood, 2015, p. 130). Although he succeeds in disentangle power and authority, he fails to get into the core of the global governance theory and the close relationship between authority and legitimacy which is particularity relevant for this master's project. Other theories tend to perceive legitimacy and authority as two sides of the same coin which is equally problematic. Within International Relations (IR) there are several examples of this fusion of the concepts. This has resulted in the creation of merged concepts such as "legitimate authority" which makes it almost impossible to study the phenomena individually.

In a recent study from 2019, Tallberg and Zürn put legitimacy in the context of IO's exercise of authority. They conceptualize legitimacy as: the belief – within a given constituency or other relevant audience such as states or societal actors – that an IO's authority is appropriately exercised (Tallberg & Zürn, 2019, p. 9). This conceptualization is different from the traditional normative understanding where legitimacy is derived from an institution's conformance to moral values such as justice and democracy (Buchanan & Keohane, 2006). Instead, it presents legitimacy as a relational property, determined by the perceptions of audiences⁷ about the exercise of authority, which I find particularly relevant for this master's project when studying an epistemic IO authority.

Furthermore, they conceptualize the nearby concepts legitimation and delegitimation as *processes of justification and contestation intended to shape such beliefs* (Tallberg & Zürn, 2019, p. 581). This tells us that legitimacy is not constant but may vary across audience and over time (Tallberg and Zürn, 2019, 10). It also explains why legitimacy and legitimation/delegitimation must be seen in context with each other even though my primary focus is to map legitimation processes without using my data as indicators for legitimacy beliefs per se. According to Tallberg and Zürn, and institution must constantly strive to nurture beliefs that its authority is appropriately exercised through actively engaging in *legitimation processes (Tallberg & Zürn, 2019, pp. 586-589)*. This way of

⁷ Audience are here understood as both state and societal actors.

distinguishing between legitimation processes and legitimacy beliefs forms the basis of the empirical framework, and the forthcoming analyses.

In the literature there are several examples of how to group institutional sources of legitimacy. Most of them seem to be based on a normative ground. This is probably related to the fact that a large proportion of studies refer to Fritz Scharpf's well-known dichotomy of input- and output legitimacy⁸ from his famous study of legitimacy of the European Union (EU) (Scharph, 1970). According to Scharpf, the EU could earn its normative legitimacy either by facilitating democratic participation or by ensuring effectiveness in achieving problemsolving outcomes for the people (Scharph, 1970). Zürn's global governance theory has a sociological understanding of legitimacy. The theory distinguishes between procedure and performance as two generic institutional sources of IO legitimacy which resembles Scharpf's input and output legitimacy. Both sources are grounded in social norms about the appropriate exercise of authority and refers to "the method of policy making within IOs" and "the quality of decision making made by IOs", respectively (Tallberg & Zürn, 2019, p. 591). In other words, one refers to the quality of decision making while the other refers to the quality of the specific decisions (Dellmuth et al., 2019, p. 4; Zürn, 2018, p. 69). What these definitions demonstrate is that both the achievement of common goods (e.g. successful vaccination programs), and the way decisions are made (e.g. democratic participation) can serve as sources of legitimacy (Zürn, 2018, p. 70).

The procedural part of this conceptualization is rooted in Weber's rational-legal sources of legitimacy (Tallberg & Zürn, 2019, p. 594; Weber et al., 1978). The main essence is that actors can choose to reward or deny legitimacy to an organization, based on whether decision-making processes are considered *appropriate* and *fair*. Hence, procedural legitimacy of an IO is related to the way the institution operates, irrespective of the impact of its policies (Dellmuth et al., 2019, p. 5). Tyler (Tyler, 1990) is frequently cited in this aspect with his argument saying that citizens and parties accept the outcomes of democratic elections, even when these go against the self-interest, because of the fairness of the procedure (Tallberg & Zürn, 2019, p. 594). When transforming this argument to the global level, there is an underlying assumption that an IOs conformance to procedural standards influences the audience's perceptions of the organization (Tallberg & Zürn, 2019, p. 594). If

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⁸ Sett inn Scharpfs definisjon av input og output legitimacy her nede.

the IO fails to live up to the procedural standards, contestation often arises which again generate efforts by the IO to defend its exercise of authority (Tallberg & Zürn, 2019, p. 594; Zürn, 2018).

The performance part of the conceptualization refers to the way audiences evaluate an institution's outcome. The referral to performance is often used in a context of domestic political institutions in social sciences literature but may also apply to the global level. If the WHO effectively contribute to combat and end the covid-19 pandemic, the institution is likely to be rewarded with altered legitimacy beliefs among audiences, irrespective of how decisions were made during the crisis. How well an organization perform can therefore also be expected to affect patterns of legitimation (Tallberg & Zürn, 2019, p. 595). If an IO fails to produce the expected outcome, there is an imminent risk of contestation in the public discourse. To regain trust and legitimacy, and IO may choose to defend itself by broadening the narrative aimed at legitimizing the IO (Tallberg & Zürn, 2019, p. 595). I will return to legitimation narratives in the next sub-section.

Zürn's global governance theory points to *impartiality* as especially relevant when studying legitimacy beliefs vis-à-vis political and epistemic authorities in the global governance system. Impartiality usually refers to a sense of fairness according to which like cases are treated alike (Zürn, 2018, p. 68). Despite inherent power relationships in the global governance system, the exercise of authority and application of rules need to be considered impartial in order to be perceived as legitimate (Zürn, 2018, p. 68). Furthermore, Zürn argues that impartiality must be fused with a *social purpose* consisting of common goals and procedures of how to accomplish these (Zürn, 2018, p. 69). Thus, authorities in the global governance system need to create beliefs that they pursue the underlying *social purpose* in an *impartial* way to be considered legitimate actors (Zürn, 2018, p. 69).

Legitimation Narratives

At the global level, sources of legitimacy in a specific authority relationship do not necessarily have to be worthy of recognition in the normative sense by abiding democratic standards. Often it is enough that the governed trust the actions of the authority. In line with this thinking, Zürn refers to *sources of legitimacy* as the raw material of any legitimation process (Zürn, 2018, p. 70). Yet, a legitimation process is rarely based on one source of

legitimacy alone. Instead, different sources of legitimacy are assembled in *legitimation narratives* (Zürn, 2018, p. 70). These narratives can be understood as *strategies* used to legitimize the exercise of authority. Zürn identifies seven such legitimation strategies: The participatory narrative, the legal narrative, the fairness narrative, the technocratic narrative, the traditional narrative, the relative gain narrative, and the manipulative narratives. Although all these legitimation narratives are allegedly present in the global governance system, some of them are expected to be more relevant for an epistemic IO authority such as the IEA.

Examples of narratives focusing on *procedure* are the "participatory narrative" and the "legal narrative". The former is based on equal opportunity of participation for all parts affected by certain regulations, while the latter is based on the protection of basic rights and the rule of law (Zürn, 2018, p. 72). Other narratives apply to the *performance narrative* which concern practices related to output and outcomes of an institution. The "fairness narrative", for example, aims at justifying the exercise of authority by fair outcomes, while the "technocratic narrative" builds on non-prejudiced expertise and knowledge of the facts (Zürn, 2018, p. 74). The technocratic narrative is closely associated with science and the objective search for truth. Other legitimation standards included in this narrative are efficiency in both policy making and problem solving (Tallberg & Zürn, 2019, p. 593). Based on my previous knowledge of the IEA as an epistemic IO authority, I find this narrative particularly interesting when studying the legitimation processes employed by the IEA.

3.1.2 Other Key Concepts in the Field of Research

In addition to the global governance concepts already discussed in section 3.2.1, I have borrowed some key concepts from other relevant theoretical directions that will add important perspectives to the discussion in this master's project.

Multilateralism

One of the most prominent researchers on multilateralism today is Robert O. Keohane. His research is based on the conceptualization of multilateralism as "the practice of coordinating national policies in groups of three or more states" (Keohane, 1990, p. 731). This understanding of the concept points to multilateralism as a cooperative activity, but not

necessarily a harmonious cooperation. Keohane argues that multilateralism arises from discord as a way of generating international regimes that achieve goals for states through reducing the costs of transactions and providing relevant information (Keohane, 1984).

Multilateralism is a very controversial phenomenon in our time. In a more recent study from 2014, Morse and Keohane address contemporary multilateralism as «contested multilateralism» characterized by competing coalitions and shifting institutional arrangements (Morse & Keohane, 2014, p. 386). These arrangements might be formal as well as informal. The phenomenon of contested multilateralism is said to occur when states and/or nonstate actors either shift their focus from one existing institution to another or create an alternative multilateral institution to compete with existing ones. This characterization resembles what Zürn refers to as "counter-institutionalization" (Zürn, 2018, p. 170). When the International Renewable Energy Agency (IRENA) was created in 2009, it was a result of contested multilateralism and counter-institutionalization (Van de Graaf, 2013). The founders of IRENA were not pleased with the way the IEA undermined renewable energy sources as part of the future energy mix and wanted to promote renewable energy as both capable and competitive energy sources in the global energy governance system.

Based on this account of the concept, a multilateral organization can be understood as an international organization established and governed by several states in cooperation. More examples of multilateral organizations are the UN, the World Bank, WTO, OECD, and the IEA.

International Regimes

Within international relations theory, a regime is commonly understood as "a set of principles, norms, rules and decision-making procedures around which actors' expectations converge in a given area of international relations" (Bradford, 2007; Krasner, 1983). Furthermore, regimes are said to mitigate anarchy that would otherwise prevail in international relations and thereby facilitate co-operation among states and other potential actors (Bradford, 2007).

The weakness of Krasner and Bradford's definition is that it includes everything from international organizations to international agreements which might seem to all-embracing for analytical purposes. I will therefore lean on Keohane's more specific conceptualization of *international regimes* as a way to "overcome obstacles and to achieve effective cooperation

by reducing transaction costs, providing expertise, defining and interpreting the rules of cooperation, monitoring state compliance, settling disputes among states, and sanctioning non-compliance" (Keohane, 1984).

So far, it has been difficult to construct an effective global energy regime because energy as a public good is anchored in what Keohane and Victor calls "entrenched discord", or inherent disputes (Keohane and Victor, 2013, 101). In a publication from 2013, Keohane and Victor explain why there is no such thing as a regime for climate change or energy (Keohane and Victor, 2013). First of all, both climate and energy issues traverse other issue areas. Thus, it requires coherent international arrangements to manage these problems. Energy supposedly faces the most serious problems due to strongly divergent interests of the actors involved. If the world faces a shortfall in oil supply, a rise in oil prices might be welcomed by oil producing countries but undesirable for oil consuming countries. Secondly, we do not have a World Energy Organization. Instead we have two huge international organizations that represent two opposite poles, they claim. The Organization of Petroleum Exporting Countries (OPEC) is known to serve the oil producing countries in the Middle East, while the IEA was created to defend the interests of oil consuming countries of the West. To make matters even more complicated for the existence of a global energy regime, there are also several examples where oil has been used as a political "weapon" to put pressure on sensitive political issues such as relationships in the Middle East (Keohane & Victor, 2013, p. 104).

3.2 Analytical Framework

The remainder of this chapter will be used to explain how central components of the theoretical framework from section 3.2 can be advanced to *an empirical study of IO legitimacy* and legitimation in the global energy governance system. I will do so by applying Tallberg and Zürns analytical framework presented in *Review of International Organizations* in 2019 (Tallberg & Zürn, 2019).

In short, their framework theorizes the relationship between the institutional features of IOs (authority, procedure, and performance), the legitimation process (intensity, tone, and narrative), and the legitimacy beliefs of audiences (constituencies and observers) (Tallberg & Zürn, 2019, pp. 583, 590-591). The specific anchoring in an individual and societal

context suggests that in addition to focusing on institutional features of IOs, one should also recognize non-institutional factors for determining legitimacy beliefs which is why I have placed great emphasized on context in this thesis. This might be *individual factors* such as political knowledge, social identity, economic standing, and personal values (Caldeira & Gibson, 1992; Hooghe & Marks, 2005; Norris, 2000; Tallberg & Zürn, 2019, p. 592) and it might be *societal factors* such as political regime, economic development, national culture, and times of instability or crisis that may affect how institutional features of IOs shape legitimation patterns and legitimacy beliefs (Eisentraut; Inglehart & Welzel, 2005; Scholte, 2018; Scholte & Tallberg, 2018; Tallberg & Zürn, 2019, p. 592).

Tallberg and Zürn's analytical framework is based on *bounded rationality* where legitimacy beliefs are seen as "the outcome of a social process where individuals' priors interact with legitimation and delegitimation in producing an evaluation of IO features audiences care about" (Tallberg & Zürn, 2019, p. 590). This understanding emphasizes on two important perspectives that supposedly shape legitimacy beliefs: 1) Citizens hold IOs to be more or less legitimate based on objective institutional features of IOs (ref. IEA in-depth analysis in chapter 5), and 2) Citizens use cognitive shortcuts to shape legitimacy beliefs, for example by listening to the way your favorite newspaper describes and frame an organization (ref. media content analysis in chapter 6).

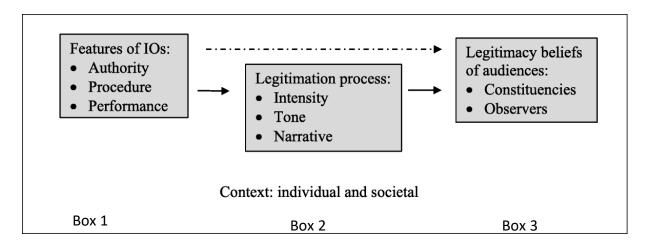


Figure 1. Analytical framework. Three central institutional features of an IO (authority, procedure, and performance) contribute to legitimation/delegitimation of an IO.

When looking into the framework in more detail (Figure 1, box 1) we see that the analytical starting point is conferral of authority to an IO. This point of departure is essential. Without

authority, there is no need for legitimacy, but *with* authority, there is a *demand* for legitimacy since the IO needs consent from the governed (Tallberg & Zürn, 2019, p. 591). Furthermore, we see that procedures and performance are pointed out as principal sources of legitimacy which coincides with Zürn's global governance theory. Basically, Tallberg and Zürn expect audiences to evaluate the legitimacy of an IO based on how well they perceive the IO authority to conform to established procedural and performance standards. This evaluation must be seen in relation to the level of authority the IO possesses (Tallberg & Zürn, 2019, p. 592).

Earlier studies on institutional sources of legitimacy often associates procedures with democracy and performance with effectiveness. Tallberg and Zürn challenge this categorical way of thinking and includes additional qualities such as expert advice, efficiency, and legality in the case of procedure, and protection of democratic rights and processes in the case of performance. The 2x2 matrix in Table 1 shows four categories of institutional sources of legitimacy (or standards) which may all generate legitimacy beliefs vis-à-vis an IO. The two horizontal rows make the distinction between the two dimensions procedure and performance, while the columns make the distinction between democratic and purposive qualities that may apply to both dimensions.

	Democratic	Purposive
Procedure (the quality	Participation; transparency;	Expert advice; efficiency;
of decision-making)	accountability; deliberation	legality
Performance (the	Protection of rights,	Problem-solving; collective
quality of decision)	protection of the democratic	welfare gains; distributive
	processes	fairness/impartiality

Table 1. Institutional standards/sources of legitimacy.

Democratic qualities should here be understood as "qualities that give expression to or promote core values of the democratic process", while purposive qualities should be understood as "qualities that serve or promote shared ends" (Tallberg & Zürn, 2019, p. 592).

In my analysis, I will explain how these institutional standards of legitimacy are part of a greater legitimation narrative used as a strategy to shape legitimacy beliefs of audiences. From chapter 3 we recall that Zürn highlights the *technocratic* and *the legal* narrative as principal strategies for creating legitimacy beliefs vis-à-vis an IO authority in the modern GG system. I could therefore choose to replace Table 1 with a 3x2 matrix consisting of a threefold distinction between democratic, technocratic, and legal qualities that might apply to both procedure and performance. Still, I decided that standards from the technocratic and legal narratives are well enough accounted for in the democratic and purposive columns.

The distinction between *legitimation processes and legitimacy beliefs* (Figure 1, box 2 and 3) is perhaps the most important element in the analytical framework. What this separation does is to help disentangle *authority* and *legitimacy* for analytical purposes. Authority and legitimacy are separated, but still linked via the notion of legitimation processes. This coincides with what Zürn refers to as the important authority-legitimacy link (ALL) which is at the core of the global governance theory (Zürn, 2018, p. 64). Legitimation processes consist of both legitimation and delegitimation and are meant to convince audiences of the success or failure of an IO in accordance with its procedural and/or performance standards (Tallberg & Zürn, 2019, p. 596). Legitimation processes often take the form of discursive and behavioral practices that invoke these standards (Tallberg & Zürn, 2019, p. 592).

Another unique feature with this framework is that legitimation/delegitimation can serve as both dependent variable and mediating variables depending on which phenomenon one wants to study, and what methods that are available. If the purpose is to map legitimation processes of different intensity, tone, and narrative, legitimation/delegitimation serves as dependent variable (ref. upcoming media content analysis). If the purpose is to explain legitimacy beliefs of specific audiences, legitimation/delegitimation serves as mediating variables (Tallberg & Zürn, 2019, p. 592) (outside the scope of this project).

Tallberg and Zürn highlight three features of the legitimation process that are expected to have an impact on legitimacy beliefs. These are *intensity*, *tone*, and *narratives* (Tallberg & Zürn, 2019, p. 596). Intensity might for example refer to the frequency (intensity) of which a certain evaluating statement towards a specific IO is published in media. Tone might refer to the direction evaluated through the statement, either critical or supportive.

Narrative might refer to the specific set of legitimation standards an IO has chosen as part of its legitimation process. According to *prospect theory*, negative messages that serves to delegitimate an actor are more effective in shaping public opinion than positive messages serving to legitimate the actor (Kahneman & Tversky, 1979; Tallberg & Zürn, 2019, p. 596).

The last stage of the analytical framework (Figure 1, box 3) involves types of audiences that serves as target when shaping legitimacy beliefs. This is essential for an organization to keep in mind when constructing a legitimation narrative and is likely to affect the chosen sources of legitimacy. The authors highlight the distinction between constituencies (e.g. member countries) and observers (e.g. non-member countries) which serves my project well.

Now that I have accounted for the passage between the theoretical and the analytical part of this project, we are ready to move on to methodological considerations.

4 Methodology

As we recall from chapter 1, the purpose of this master's project was to explore how the IEA legitimizes its exercise of authority in the global governance system despite institutionalized legitimacy issues. I will do so by mapping patterns of legitimation processes employed by the IEA to nurture the belief that its authority is appropriately exercised. This chapter will provide an in-depth account for the rationale behind the chosen research design used to answer the research questions. I will explain what kind of research I have done, how my study was conducted, what methods and procedures I used for collecting data, and how I analyzed the data. But first I will start by providing a philosophical input to the methodology.

4.1 Philosophical Stance

As a somewhat experienced but far from trained researcher I will be careful to position myself permanently within one particular philosophical orientation. When that being said, I predominantly identify myself in the epistemological camp where I am concerned with what I can know about the specific world I am studying and how I came to know this conclusion. More precisely, I am concerned with "the nature and structural relationships between certain social phenomena" (Furlong & Marsh, 2010, pp. 18-19). I am drawn to the desire to

identify causes of social behavior and provide explanations, and I stress the role of theory in my interpretations. This "realistic" epistemological attitude has shaped the design of my research questions and my methodological approach to problem solving, and it explains the strong focus on theory.

4.2 Exploratory Case Study Design

When I first engaged in the study of legitimacy of reflexive IO authorities, I realized it was far more common to study legitimacy in relation to political IO authorities than epistemic IO authorities. For this master's project I therefore chose an exploratory case study design with the intention to investigate *legitimation processes in relation to epistemic IO authorities*.

A case study can be described as *a study of a social phenomenon in its real context* and is often used in exploratory studies when the phenomenon of interest lacks detailed preliminary research (Bukve, 2016, p. 212; Swanborn, 2010, pp. 12-13). Among the many analytical strengths of a case study, I wish to emphasize on two important contributions: 1) *Its ability to produce context-dependent in-depth knowledge*, and 2) *Its ability to provide insight for further research*. Case studies can be *positivist* in nature (for theory testing) or *interpretive* (for theory building). This project was largely based on expanding existing theory and therefore falls into the interpretive category. Interpretive case study research employs inductive techniques, meaning that data is collected from one or more cases and then systematically analyzed and synthesized to allow concepts and patterns to emerge (Bhattacherjee, 2012). Moreover, the case study was conducted *diachronically*, meaning that the case was studied over a ten-year period as a longitudinal study. The specific case I chose for my master's project goes as follows:

"Legitimation strategies employed by an epistemic IO authority during a ten-year period".

I have already briefly touched upon the rationale for choosing this particular case. A lot of research has been done on the legitimacy of *political* IO authorities such as the EU, but there are very few similar in-depth studies on *epistemic* authorities, especially within the global energy governance system. Based on the theory from chapter 3, I expected epistemic IO authorities to legitimize themselves by the means of other legitimation narratives than a political IO authority that often turns to a democratic legitimation narrative. A time aspect

was added to the case that allowed me to identify variation across time in the way the selected epistemic authority chose to legitimize itself.

In this master's project I have employed an *embedded* case study design ⁹with two separate levels of analysis. First, an institutional in-depth analysis of my chosen epistemic IO authority (chapter 5), and second, a combined quantitative/qualitative media content analysis (chapter 6). Both analyses can inform research about the nature of the legitimation process, but the dual analysis will provide a wider contextual understanding of the phenomenon.

There are always limitations associated with any research design. What I consider to be the most prominent limitation of this specific case study is the lack of possibility for formal generalization¹⁰ of results to the broader population of epistemic authorities. This can be improved by replicating the case study on other units of analysis, but epistemic authorities are very different in structure, mandate, and scope of work. Some are taskspecific organizations, while others are concerned with multiple "common goods" that need to be governed. Not to mention that a crisis at the global level might affect epistemic IO authorities very differently. The legitimation narrative guiding the legitimation process of a selected epistemic IO authority is therefore not necessarily identical to the ones employed by another epistemic authority at the global level. One can, however, choose to interpret the solid theoretical basis of this master's project as a point of departure for theoretical generalization. This will not provide formal generalization, but it can serve as a slightly more abstract, or informal, generalization which fits well with an exploratory case design. The way I have used theory to support my case and the discussion around it has helped to elevate my specific findings into a more general analytical context. The specific role of theory in this research design is therefore twofold: 1) it "nourishes" the exploratory element, and 2) it elevates my findings to a more generalizing level.

Another limitation in research design is the risk of "researcher bias" where I as a researcher may influence the research with my own subjective feelings as I will explain in more detail when assessing data quality later in this chapter.

⁹ An embedded case study is a case study containing more than one sub-unit of analysis (Yin, 2003).

¹⁰ Formal generalization refers to process whereby one or more individual findings are shown to be common in several other instances. (Køppe, Simo & Levin, Kasper & Hansen, Jannik & Bechmann Jensen, Torben & Roald, Tone. (2021). Why Do We Always Generalize in Qualitative Research. Qualitative Psychology. 8. 69–81. 10.1037/qup0000138).

4.3 Unit of Analysis

My chosen unit of analysis is the IEA, representing an epistemic IO authority in the global energy governance system. What I find particularly interesting with a knowledge producing IO such as the IEA is its ability to influence policies and to pass knowledge on from the global level, through the national level, and eventually to the local level where it influences the opinions of citizens like you and me.

As a bachelor's student I did a small study on global energy governance. Also then, the IEA served as the unit of analysis. At the time, I was a student at Sciences Po, Paris and I was lucky to be able to visit the IEA premises and do an expert interview. The study spurred my interest in the organization and inspired me to build the master's project around the same topic.

4.4 Mixed Method Approach

When collecting data for the case study I used a mixed method approach which in this study consists of a mixed qualitative and quantitative approach. The mixed method approach has been used as a strategy to ensure data reliability and validity by securing the strengths of each method, while counteracting the limitations of each method when used in isolation. Despite well-known "stylistic" differences between qualitative and quantitative research, King, Keohane, and Verba claim that they are based on the same logic of inference and that both qualitative and quantitative research can be systematic and scientific (King et al., 1994, pp. 4-5). Although the methodological approaches in the two analyzes are very different, both levels of analyses rely on *content analysis*, and both are constructed around the same analytical framework to create consistency. In the following two sections I will explain the methodological approaches used for each of the two levels of analysis.

4.5 Methodological Approach for the Institutional In-depth Analysis

4.5.1 Data Collection Procedure

When studying complex phenomena at the global level it is often necessary to include information that cannot easily be quantified, especially in the exploratory stage where we

more or less dive into the unknown with the intention to extract detailed contextual real-world information. For this reason, the first level of analysis in this master's project consists of qualitative research in the shape of a content analysis.

When conducting a content analysis (qualitative as well as quantitative), source criticism is especially important. Inclusionary and exclusionary criteria was therefore essential for ensuring systematic document selection and reducing irrelevant data throughout the data collection process. The data material was largely based on secondary data¹¹. Since the case study involved self-legitimation strategies employed by the IEA, I did not have to worry too much about subjectivity when I searched through the organization's own websites and archives. My focus was all the time to learn more about how the IEA defend its own exercise of authority. Data for the first analysis was therefore largely retrieved from the IEA's own websites, anniversary yearbooks, archives, strategy documents, policy documents, press releases, and media reports.

4.5.2 Method of Analysis

The in-depth analysis of the IEA was meant to reveal relevant IO features (and legitimation narratives) that are believed to shape legitimacy beliefs among audiences. This coincides with the logic of the analytical framework (Figure 3, box 1).

After repeated review and examination of the collected data material I decided to systematize the data and present them as an *institutional in-depth analysis*¹². This enabled me to present my findings in a systematic and comprehensive way. To understand how the IEA came to be such an influential energy actor I found it both necessary and important to include some of the turbulent history of the organization in the analysis, as well as its relationship to other global actors. The institutional in-depth analysis can be found in chapter 5.

¹¹ Secondary data means data first collected by someone else.

¹² This was an analytical approach recommended by lecturer Yann Aguila who taught public law and environmental law at Sciences Po during my Erasmus exchange. An in-depth account of institutional features as well as contextual surrounding is the gateway to an organization's ID.

4.5.3 Data Quality

Kimberly Neuendorf highlights validity, reliability, accuracy, and precision as key standards for good measurement in any content analysis in her well-known publication "The Content Analysis Guidebook" (Neuendorf, 2017, p. 122).

Validity is the extent to which a measuring procedure represents the intended concept (Neuendorf, 2017, p. 122). Or put in a slightly different way, the extent to which an empirical measure adequately reflects what humans agree on as the real meaning of a concept (Babbie, 2013, p. 151). Basically, it forces us to ask the question "Are we measuring what we want to measure?". To secure validity for the entire master's project I outlined a measurement validity scheme from the very beginning of my project where I defined and operationalized key concepts and how these could be measured. The scheme served as a theoretical and analytical guideline and ensured accuracy throughout the project. The scheme was adopted from Adcock and Colliers "Concept Formation and Measurement Validity in Political Science" (Adcock & Collier, 2001) and can be found in Appendix 1.

Reliability is the extent to which a measuring procedure yields the same results on repeated trials (Carmines & Zeller, 1979; Neuendorf, 2017, p. 122). This includes several types, for example the notions of internal consistency of multiple indicators (which is relevant for the in-depth analysis) and several types of coder reliability (which is relevant for the coming human-coded media content analysis) (Neuendorf, 2017, p. 122). Since the indepth analysis was based on public available documents which are all accounted for in the reference list, my main concern was to make sure that my *sources* were reliable.

Accuracy is the extent to which a measuring procedure is free from bias (non-random error) (Neuendorf, 2017, p. 123). I have made an honest effort to stay as objective and open-minded as possible throughout the data collection process and during the analysis itself.

Precision is the fineness of distinction between categories or levels of a measure (Neuendorf, 2017, p. 123). When I outlined the measurement validity scheme in Appendix 1 in line with Adcock and Colliers recommendations, I was forced to reflect on appropriate indicators to measure my key concept and how I would apply these indicators to produce scores for the case being measured.

All in all, these four factors together contribute to a greater degree of analytical control for both levels of analysis. By analytical control I mean the connection between 1) theory, method, and analysis as a design question on the one hand, and 2) the

implementation, the assessments, and the conclusion on the other hand. There are many examples of studies that are good at either 1) or 2), but the overall quality often depends on the connection between them. Due to a high level of quality controls and the use of methodological standards such as a peer-reviewed analytical framework to connect theory, analysis, interpretations, and assessment of the results, I will argue that my chosen research design can account for both levels of control.

4.6 Methodological Approach for the Media Content Analysis

4.6.1 Data Collection Procedure

While content analysis was a natural choice for the institutional in-depth analysis, it also proved to be a good method for mapping patterns of legitimation processes employed by the IEA to legitimize its exercise of authority in the global governance system. In fact, content analysis has been the fastest-growing technique over the past 40 years or so in the field of mass communication research (Neuendorf, 2017; Yale & Gilly, 1988). Different forms of content analysis are also the favored methods for getting at the intensity, tone, and narratives of legitimation and delegitimation discourses (Binder & Heupel, 2015; Hurrelmann & Schneider, 2015).

In 2018, Henning Schmidtke (Schmidtke, 2018) did a study where he mapped and explained variation in the intensity and tone of legitimacy communication in several "quality press¹³" newspapers. According to Schmidtke, the quality press is a key political venue through which elites¹⁴ compete with one another to foster new ideas and to promote their evaluations of IO legitimacy (Schmidtke, 2018, p. 642). In this master's project, I will not focus on elite communication in particular, but the rationale for choosing quality newspapers that focus on serious dissemination of political news is basically the same.

¹³ The term "Quality press" is a category of British newspapers in national circulation distinguished by their seriousness. The category used to be called "broadsheet" until several papers adopted a tabloid format. Both The Times and The Independent adopted a tabloid format in 2004. The Guardian adopted a Berliner format in 2005, before switching to tabloid in January 2018 (Peter Preston. "Circulation falls for UK quality press". Guardian. What's New in Publishing; https://zims-

 $en. kiwix. campusa frica.gos. orange. com/wikipedia_en_all_nopic/A/Quality_press).$

¹⁴ Elites refer to national executives and political parties, international bureaucrats, economic actors, and civil society organizations, are central actors in the political struggle about IO legitimacy as they Bmay be able to make their positive or negative support count more than high levels of support from unorganized Millions (Easton 1965, 167) Easton, D. (1965). A Systems Analysis of Political Life. New York: Wiley

Schmidtke's study was based on a quantitative content analysis and a multinominal logistic regression analysis. His text corpus spanned a fifteen-year time period and consisted of roughly 6500 legitimation statements of the EU, the G8, and the UN (all political IO authorities) in quality press newspapers in four western democracies. His finding suggested that IOs with more extensive authority are subject to more intense legitimation and delegitimation processes, and that political events such as security crisis or institutional reform create a complex normative environment for IOs (Schmidtke, 2018, pp. 633, 653).

Inspired by his study, I decided to adopt parts of his methodology, but instead of delimiting my study to collecting information about what elites say about the IEA, I opened up for collecting data on several additional variables. Driven by a pre-made codebook and sample coding form (created after a first quick review of the data material), I collected data related to *sources of legitimacy* such as expertise, problem-solving and collective gains and *contextual data* related to crisis, global dialogue, and energy sector. I also included two variables with referral to IEA experts when communicating a message. The sample coding form and the codebook can be found in Appendix 2 and Appendix 3, respectively.

The empirical material for the media analysis was retrieved from Factiva, a global news monitoring database and search engine owned by Dow Jones & Company. This is the same database that Schmidtke used for his study. Factiva consists of 36,000 news sources from 200 countries and includes content from well-known and less-known newspapers, archives, blogs, and channels all over the world. Since my home university does not have access to Factiva, I searched for substitute databases available at my campus. Unfortunately, I soon realized that these were insufficient for my purpose. An individual Factiva-subscription is very costly, so I contacted Factiva and was finally granted a free trial.

Before I could embark on the sampling, I had to take a lot of decisions ranging from choice of sample countries, what kind of newspapers I wanted to include, how many newspapers I wanted to include, what search routines to use, and how I should organize my data. The choice on sampling countries fell on France, US and the UK. These are all IEA-member countries, and each country has its own unique relationship to the IEA. The US was the initiator of the creation of the IEA and still has a central position in the agency. France was for many years skeptical of becoming an IEA member but has always hosted the agency in Paris. The UK used to be a global leader within fossil fuels but is today credited the role as a global leader in decarbonization by the IEA.

From earlier media research we know that newspapers differ ideologically and is often placed on a left-right spectrum (Hallin & Mancini, 2004; Lichter, 2017; Schmidtke, 2018, p. 643). They also often give preferential access to certain actors, and present news in a left-right biased manner (Schmidtke, 2018, p. 643). To avoid this bias, I followed Schmidtke's example and collected data from one center-left and one center-right quality newspaper from every country as far as this was possible. In the US, there are no centreright quality newspapers that focus on political news (Budak et al., 2016; Gentzkow & Shapiro, 2010). The only centre-right newspaper is the Wall Street Journal which has a strong focus on business and financial news (Schmidtke, 2018, p. 643). This newspaper was therefore not included in the sample. Instead I chose The Washington Post which is a centrist newspaper, and the The New York Times (centre-left) - the same two newspapers that Schmidtke used in his study. Great Britain was also one of the original sample countries in Schmidtke's study, so I chose the same newspapers also in this case: The Guardian (centre-left) and The Times (centre-right). France was not one of the sample countries in Schmidtke's study. I ended up choosing Le Monde (centre-left) and Le Figaro (centre-right). More information about the chosen newspapers can be found in the codebook, Appendix 3.

Once the first crucial choices for the sampling process were taken, I made a plan for how I would organize and store my data once retrieved. I also tested several search routines, some very simple, and others far more detailed to get a sense of how much data material that was included for each search. Another purpose for testing the search routines was to make sure that as many relevant news articles as possible were included in the search (thus minimizing false negatives), and at the same time trying to keep as many irrelevant articles as possible outside the search output (thus minimizing false positives). I ended up choosing a very simple search routine involving *all* news articles in the six newspapers that mentioned the IEA in the chosen ten-year period. The search routine was also translated to French.

English search routine:

(Factiva): (IEA or I.E.A or (International adj1 Energy adj1 Agency))

French search routine:

(Factiva): A.I.E or (Agence adj1 internationale adj1 de l'énergie)) or (IEA or I.E.A or (International adj1 Energy adj1 Agency))

Text	(IEA or I.E.A or (International adj1 Energy adj1 Agency))
Date	01/01/2010 to 01/01/2021
Source	Washington Post - All sources
Author	All Authors
Company	International Energy Agency
Subject	All Subjects
Industry	All Industries
Region	All Regions
Language	All Languages
Results Found	134
Timestamp	3 March 2021 10:09

Table 2. English search summary (example from *The Washington Post* search in Factiva).

Text	(AIE or A.I.E or (Agence adj1 internationale adj1 de l'énergie)) or (IEA or I.E.A or (International adj1 Energy adj1 Agency))
Date	01/01/2010 to 01/01/2021
Source	Le Monde - All sources
Author	All Authors
Company	International Energy Agency
Subject	All Subjects
Industry	All Industries
Region	All Regions
Language	All Languages
Results Found	172
Timestamp	3 March 2021 11:18

Table 3. French seach summary (example from the *Le Monde* search in Factiva).

After the data material was fine-tuned for duplicates and small notes or abstracts pointing to the page number of a main article in the same newspaper issue, I was left with 800 news articles.

4.6.2 Method of Analysis

Before I began on the comprehensive analysis, the data material was sorted and prepared by adding a unique number to each article starting with The Guardian and continuing with The Times, The New York Times, The Washington Post, Le Monde, and finally Le Figaro. Since this was *not* a statistical analysis, and since I was doing manual human coding only, no additional software was needed.

The last step of preparation before I could embark on the real analysis was to run a pilot test on +/- 30 articles, using a random number generator. This pilot resulted in some minor changes on the variables and associated text in the codebook. It also resulted in exclusion of two variables that I realized would difficult and perhaps even impossible to measure based on the available data material. The variables I chose to exclude were the two legitimacy sources "impartiality" and "efficiency".

I had a slightly different approach than Schmidtke when I started working on the large data material. Instead of having a very specific plan for what I would find in the analysis, I had a more open-minded approach. I was unaware of what I could learn from the data material and how I would present the results in the end. This way of working with the data resembles the inductive "grounded theory" approach where "the researcher seeks to develop, extend and refine emerging analytical themes, categories and hypothesis during and from the data collection process" (Charmaz, 2003; Glaser & Strauss, 1967). To make sure that I captured the societal context I also chose to gather qualitative data from articles that provided useful contextual information for the up-coming analysis. A "qualitative free-text section" was therefore added to all the sample coding forms, see Appendix 2.

After I had completed the entire coding process which took several weeks, I decided to quality proof all 800 sample coding forms to make sure that the data was coded in accordance with the codebook. This was very time consuming, but I felt this last round of quality check indeed added a quality stamp to the data material, and it allowed me to pick up some errors that had occurred during the main round.

4.6.3 Data Quality

In a media content analysis that are based data that are collected and interpreted by a human coder, data quality becomes essential for the results to be trusted upon. As for the in-depth analysis, *validity*, *reliability*, *accuracy*, and *precision* were used as key standards for good measurement also in this second analysis.

With regards to *validity*, one often distinguishes between internal and external validity. Internal validity coincides with the definition from section 4.5.3 and the question "Are we measuring what we want to measure?". The measurement validity scheme in Appendix 1 served as a guideline also in this analysis. External validity means whether the results of a measure can be extrapolated to other settings. Since international authorities

are different on so many levels, it is not possible to generalize my findings in the sense that what I learn about my unit of analysis also applies to other epistemic IO authorities (see discussion on theoretical generalization in section 4.2). Most likely there are many similarities, but that is outside the scope of this thesis to account for. External validity can on the other hand also be understood as replicability and the possibility for others to repeat the project or use the same method on other IO authorities.

In a media content analysis where the researcher holds the role as a "human coder", reliability often translates to "intercoder reliability", which means level of agreement among two or more coders (Neuendorf, 2017, p. 19). For this master's thesis, I was the only human coder and the issue of intercoder reliability was therefore not relevant. Instead, I had to be careful not to let my own subjective feelings or perceptions influence the coding process. To make sure that I had an acceptable level of reliability, I carefully wrote down the rules for coding in the codebook as seen in Appendix 3. My chosen variables were mainly related to the coding of manifest content. This made it easier to meet the objectivity criterion (Neuendorf, 2017, p. 170). Some variables, however, were closer to the latent pole. These were first and foremost the variables «Collective gains (global)» and «Positive / Negative tone against the IEA». In these cases, I had to use a higher degree of discretion, which usually results in lower reliability scores. I chose to use the variable "Collective gains" when the text highlighted a public good that applied not only to certain groups or regions (for example OECD countries), but to the global community as a whole. Fighting climate change and global economic recovery are examples of media content coded as global collective gains. Positive and negative tone in media coverage can also be a challenge to measure. In the codebook, I therefore clearly wrote down how I chose to code these variables.

One can never completely escape from bias in a study built on human coding and interpretation. *Accuracy* and the effort to avoid non-random errors was still a highly coveted goal on my part. I had no clear ideas as to what similarities/inequalities I expected to find in the media coverage in the various newspapers which I believe served as a strength in terms of accuracy.

For the media content analysis, fineness of distinction made between categories or levels of a measure (precision) was accounted for during the design of the codebook. All variables were carefully explained and delimited.

5 Institutional In-depth Analysis of the IEA

This chapter provides an in-depth analysis of the IEA with regards to institutional features and scope of work. These are elements that are believed to create legitimacy beliefs among different audiences and will shed light on IEA's efforts of becoming an influential and proactive authority within the global energy governance system.

5.1 Origins and Legal Nature

The International Energy Agency (IEA) was founded under the Agreement on an International Energy Program (I.E.P.)¹⁵, signed in Paris on the 18th of November 1974 (Scott, 2004a). The I.E.P. was an initiative promoted by the US government to assist western industrialized countries in collectively addressing oil supply crisis (Wilson, 2016, p. 5).

During the Middle East War crisis in 1973-1974, the developed West experienced how vulnerable they were to the new economic power relationship that had arized in favour of the oil-producing countries (Scott, 2011, 19). There were particularly two unexpected maneuvers that almost paralyzed the western industrialized world; 1) the Arab member countries of the Organization of Petroleum Exporting countries (OAPEC) imposed embargo on oil export to countries who questioned Middle East policies with respect to Israel, and 2) the OPEC countries, who had provided a relatively stable oil supply since the late 60s, began to raise the price of oil due to the members long-term dissatisfaction with the income of their strongly demanded energy resource (Florini, 2011, p. 11; Scott, 2004a, p. 27).

At that time, there was little convergence across Western borders on energy policies despite the fact that members of the Organization for Economic Co-operation and Development (OECD) accounted for 73% of global oil consumption (Wilson, 2016, p. 5). Energy policy was normally handled by the national authorities, but this time the combination of economic and political issues revealed their weaknesses in standing alone (Scott, 2004a, p. 29). Like the oil companies, national governments were hampered by insufficient market information and organizational weaknesses (Scott, 2004a, p. 29). The

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¹⁵ Hereafter referred to as the I.E.P. Agreement.

existing OECD system also revealed lack of governance mechanisms to deal with such shocks in oil supply, and the few existing international institutions with coordination of energy policy as their core mission such as the International Energy Forum (IEF) and the Energy Charter Treaty (ECT), lacked institutional capacity (Van de Graaf, 2012, p. 233). It became obvious that the existing institutional basis for cooperation on energy policy was inadequate (Scott, 2004a, p. 29).

To meet the new challanges in the global power relationships, the founding members ¹⁶ of the new energy agency agreed that they needed a more permanent solution in the shape of a public international organization (Scott, 2004a). The decision to design the IEA as an autonomous organization in the framework of the OECD was largely ment to ensure that the IEA became a quickly operational unit, but at the same time able to build on existing OECD expertise within energy issues, economic analysis and statistics (Scott, 2004a, p. 41; Wilson, 2016, p. 3). It was also a conscious choice to provide *efficiency* to policy making and avoid possible future obstacles. If the IEA were to be established *within* the OECD, the voting rules of the OECD would allow any one of the OECD members to oppose an OECD Council proposal to establish the energy agency, and it would allow for the OECD to interfere with decisions and operations of the agency ones it was established (Scott, 2004a, pp. 41-42).

5.2 Membership Criteria

The I.E.P Agreement states that membership of the IEA is limited to OECD countries, but an OECD membership does not automatically result in an IEA membership. A member also has to fulfil certain criteria listed in the I.E.P. Agreement. All members must demonstrate that is has reserves of crude oil and/or product equivalent to 90 days average net oil import. In addition, members must possess a national emergency oil sharing mechanisms that has to be enshrined in national legislation ("Agreement on an International Energy Program," 2018; Scott, 2004a, p. 39; Wilson, 2016, p. 5).

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¹⁶ The IEA's founding members were Austria, Belgium, Canada, Denmark, Germany, Ireland, Italy, Japan, Luxembourg, The Netherlands, Norway (under a special Agreement), Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States. They were followed by Greece (1976), New Zealand (1977), Australia (1979), Portugal (1981), Finland (1992), France (1992), Hungary (1997), Czech Republic (2001), Republic of Korea (2002), Slovak Republic (2007), Poland (2008), Estonia (2014), and Mexico (2018). https://www.iea.org/about/history

Furthermore, all oil companies based in the IEA countries are obliged to provide regular information on oil flow to the organization (Wilson, 2016, p. 5). Finally, all member countries must have a credible demand-restraint programme for reducing national consumption in the event of an emergency response by up to 10% ("Agreement on an International Energy Program," 2018; Wilson, 2016, p. 5).

Today, the IEA has 30 members (see footnote 13), and three OECD-members are currently seeking full membership; Chile, Israel and Lithuania. In adition, the new «Open Door Policy» of the IEA has opened up for strategic association countries to become part of the IEA family. The association countries will benefit from being included in the global energy dialogue, but will never have a full membership unless the membership criterias are revised. Currently there are eight association countries; Brazil, China, India, Indonesia, Morocco, Singapore, South Africa, and Thailand.

5.3 Objectives and Evolving Mission

The initial objectives written in the I.E.P. Agreement were the result of a series of diplomatic processes that were initiated by the US in the midst of the oil crisis. U.S. Secretary of State Kissinger claimed that the energy crisis was not solely a product of the Arab-Israeli war. It was also an inevitable consequence of the explosive growth of the world-wide demand outrunning the incentives for supply (Scott, 2004a, p. 44; "Un Nouveau 'Discours de Harvard'," 1973). In his speech to the Pilgrims Society in December 1973, Kissinger claimed that the long term solution to the crisis was to provide the producers an incentive to increase their oil supply, to encourange the producers to rationalize existing oil supplies and to develop alternative energy sources (Scott, 2004a, p. 44; "Un Nouveau 'Discours de Harvard'," 1973). He also proposed to establish an «Energy Action Group» consisting of high officials from the European countries, North America and Japan. Kissinger's groundbreaking proposal is of great importance when studying global energy governance. It is the first official statement concerning a new institutional arrangement dealing with energy issues (Scott, 2004a). The initial ideas made by Kissinger in his speech to the Pilgrims Society are reflected in the objectives listed in the preamble of the I.E.P. Agreement.

- To promote secure oil supplies on reasonable and equitable terms.
- To take common, effective measures to meet oil supply emergencies by developing an emergency self-sufficiency in oil supplies, restraining demand, and allocating supplies among member countries on an equitable basis.
- To promote cooperative relations with oil-producing countries and with other consuming countries including those of the developing world [...].
- To play an active role in relation to the oil industry by establishing a comprehensive international information system and a permanent framework for consultation with oil companies.
- To reduce dependence on imported oil by undertaking long term cooperative
 efforts on conservation of energy, on accelerated development of alternative
 sources of energy, and on research and development in the energy field [...].

While oil security remains a key focus area, the objectives of the IEA have evolved over time as the global political situation has changed. Modernization strategies has taken place in several rounds. From the 80s and onwards the Governing Board started encouraging the organization to broaden its scope beyond merely short-term oil supply management (Van de Graaf & Lesage, 2009, p. 303). This "widening" of the organizations mission gained momentum in the early 90s. In 1992, the IEA Ministerial built a new foundation when they decided on four strategic focus areas: Energy security, Economic development, Environmental awareness, and Engagement worldwide. This was further reinforced one year later when the IEA Ministerial adopted the nine "Shared Goals", often summarized as the "3Es": Energy Security, Environmental Protection and Economic Growth (Mignone, 2005, p. 44). The "Shared Goals" policy framework was and is a milestone document where the member countries agreed on the following:

... to create conditions in which their economies' energy sectors can make the fullest possible contribution to sustainable economic development and to the well-being of their people and of the environment. In formulating energy policies, the establishment of free and open markets is a fundamental point of departure, though governments need to give

particular emphasis to energy security and environmental protection. IEA countries recognize the significance of increasing global interdependence in energy, and so they seek to promote the effective operation of international energy markets and to encourage dialogue with all participants ("IEA: Shared Goals," 1993).

There are several important points to draw from the excerpt of the policy framework above. The Shared Goals emphasize on the *effectiveness* of markets systems and free trade (Van de Graaf & Lesage, 2009, p. 304). By doing so, it practically "outdates" the characteristic oil sharing mechanisms that is incorporated in the I.E.P. Agreement. This new way of thinking had several common denominators with a wider shift in the international oil market at that time towards *liberalization* and *global integration* (Van de Graaf & Lesage, 2009, p. 304). In the wake of the Cold War, the IEA countries expected that energy would soon be traded on a global, free, and transparent market and found it important to establish energy policies that could accommodate for such arrangements.

Despite this emphasis on the free markets, the shared goals allowed for regulatory intervention by governments with regards to energy security and environmental protection. Goal seven in the policy framework give us one such example of governmental intervention when it suggests that the environmental costs of energy production and use should be internalized in the price. It is also worth pointing out that 5 of the 9 Shared goals directly refer to the environment. This was an important feature of the organization's legitimacy efforts as environmental issues had already become increasingly important in domestic politics.

This shift in focus in the 90s has shaped the organization as we know it today. More recently, in 2015, the IEA Ministerial agreed on three strategic pillars for modernizing the agency once again. The proposal came from the newly elected executive director Fatih Birol. His ambitions as the new leader of the organization was to strengthen the agency's role as an "authoritative voice on global energy policy" ¹⁷ by focusing on creating a more inclusive and truly global agency through closer engagement with emerging energy economies (History, 2021).

¹⁷ This new modernization strategy has inspired the title of this master's thesis.

The three pillars of the modernization of the IEA as of 2015 is structured as follows:

- Strengthening and broadening the IEA's commitment to energy security beyond oil, to natural gas and electricity.
- 2. Deepening the IEA's engagement with major emerging economies.
- 3. Providing a greater focus on clean energy technology, including energy efficiency.

As part of the modernization strategy in 2015, the IEA Ministerial also activated the "Association" with non-OECD countries. According to the organization itself, this initiative has become "a door opener for a new era of international energy cooperation" (IEA/Membership, 2021).

Today, the IEA is determined to «steering the world toward secure and sustainable energy transitions», and «staying at the center of the global energy debate» (*History*, 2021). The organization has taken an «all fuels-all technologies» approach and is focusing on a wide variety of issues such as electricity security, investments, climate change, air pollution, energy access, and energy efficiency.

5.4 Organizational Structure

The internal structure of the IEA has remained almost constant since the organization was established in 1974 (Van de Graaf, 2012, p. 240). The principal internal bodies are essentially the same, although the number and composition of staff has changes, especially in the last two decades. Section 5.4.1 and 5.4.2 will account for the basic internal bodies of the IEA.

5.4.1 Policy-Making Bodies

The executive body of IEA is the *Secretariat* who manages the policy work of the IEA. It is a large body consisting of about 280 experts, traditionally recruited from IEA member countries¹⁸. Most IEA staff are on fixed term contracts or on loan from member countries. The Secretariat is led by the Executive Director who is appointed by the Governing Board

¹⁸ I have not succeeded in getting an answer from the IEA to the question of whether experts have recently also been recruited from Associated member countries. In that case, it would be another game changer for the organization's traditional OECD mentality.

for a term of four years. In addition to managing the internal organization of the IEA, the Executive Director has become the public face of the organization, leading the dialogue with both member and non-member countries, international stakeholders, and other international bodies. The Secretariat plays a key role in preparing the agenda for Governing Board meetings together with the Board Chairman, and a draft agenda for each meeting has been prepared and circulated by the Secretariat (Scott, 2004a, p. 182).

Four internal organs, or *Standing Groups*, are responsible for coordinating the main policy areas of the IEA. Each Standing group are composed of one or more civil servants from the IEA member countries (I.E.P., article 54). The specific mandates of the Standing Groups are presented in article 55-58 in the I.E.P. Agreement.

The Standing Group on Emergency Questions is responsible for managing emergency actions on oil markets, a topic that is covered in chapter I to IV in the I.E.P. Agreement. This Standing Group is informed by constant data monitoring provided by the Standing Group on the Oil Market (Wilson, 2016, p. 7). A more detailed description of the area of work for the Standing Group on the Oil Market is described in chapters V and VI of the I.E.P. Agreement. The Standing Group on Long-term Cooperation focuses on areas such as collective energy security, energy technology, energy efficiency, and environmental protection. A more detailed description of its area of work is covered in chapter VII in the I.E.P. Agreement. The Standing Group on Global Energy Dialogue¹⁹ is responsible for managing relations with key countries outside the IEA framework, including developing countries. All four Standing Groups must also be prepared to carry out other functions delegated to it by the Governing Board (I.E.P., article 55).

In addition to the Secretariat and the four Standing Groups that are all "treaty-created" bodies, two other internal bodies (Committees) are involved in policy making in the IEA. *The two committees* were created by the Governing Board, acting under article 49.2 in the I.E.P. Agreements stating that the Governing Board "... may, acting by majority, establish any other organ necessary for the implementation of the Program" (Scott, 2004a, p. 237). *The Committee on Energy Research and Technology* (CERT) coordinates and promotes the development, demonstration, and deployment of technologies to meet challenges in the energy sector (*IEA/Structure*, 2021). Expert groups and working groups

 $^{^{19}}$ Named "The Standing Group on Relations with Producer and other Consumer Countries" in the I.E.P. Agreement.

have later on been established under the CERT within fossil energy, renewable energy technologies, energy end-use technologies, and fusion power. Finally, *The Committee on Budget and Expenditure* (CBE) advises the Governing Board on resource management and administration (*IEA/Structure*, 2021).

5.4.2 Decision-Making Bodies

The deliberative body and main decision-making body of the IEA is the *Governing Board*. It is composed of energy ministers or their delegates from each member country (I.E.P., article 59). The Governing Board is responsable for electing the Executive Director as well as setting strategic priorities, work plans, and budget of the IEA Secretariat (Wilson, 2016, p. 7). The Board holds three to four meeting every year at senior civil servant level where global energy development and ongoing/future work of the IEA is discussed (Wilson, 2016, p. 8). The resulting outcome from these meetings are called "Conclusions" and are binding on all member countries (I.E.P., article 52).

Another configuration of the Governing Board is the *IEA Ministerial* where ministers from member countries gather every second year to set broad strategic priorities for the IEA and the Secretariat (Wilson, 2016, p. 8). Through the IEA Ministerial, the Secretariat is delegated responsability of developing ideas for existing or new programs, which are then discussed with member states through IEA Standing Groups and Committees. If the IEA Ministerial does not agree on the priorities of the Secretariat, they occasionally intervene and change the course of direction (Wilson, 2016, p. 8). In section 5.3 we saw how the IEA Ministerial on several occasions has set a new course of direction for the organization as part of a strategic modernization (legitimation) process.

5.5 Voting System

IEA decisions are usually taken by *consensus* within the Governing Board (Wilson, 2016, p. 9). When formal voting is required, it occurs through *majority voting* or *unanimity* ²⁰ in

²⁰ A principle derived from the Westphalian thinking were states were not subject to any external authority. As a result, any international regulation had to be based on the consent principle, and international law was a weak instrument (Zurn: 35). A consensus-oriented process is one in which the countries work together to reach as much agreement as possible. In practice, this means that some states/actors will be asked to implement decisions they do not agree on (Zürn, 2018). Unanimity refers to the outcome of a vote showing all members agree. It therefore requires all of the votes of the participating countries present and voting.

accordance with a complex voting system outlined in article 61 and 62 of the I.E.P. Agreement. The voting system consists of a combination of two kinds of votes: *Oil consumption voting weights* ("weighted votes") and *general voting weights* ("unweighted votes"). The weighted votes are proportional to national oil consumption of each member country as of 1973, while the unweighted votes are assigned equally to each nation (3 per member country) (I.E.P., article 62) (Hirst and Yang, 2017, p. 25). This system of combined voting weights means that the IEA has *institutionalized inequality* which is common in many IO authorities. The system is designed to maintain the balance between larger and smaller countries by requiring that all majority decisions voted on, need both the majority of weighted votes *and* the majority of unweighted votes (Hirst and Yang, 2017, p. 25). This manoeuvre is ment to protect the rights and interests of smaller countries. A curiosity is that the weighted votes are still based on net oil imports in 1973 and has never been revised although the oil comsumption voting weights would have looked very different if they were drafted today. The geographical balance of voting power in the IEA has also gradually shifted over time as new members have been included as IEA members.

Majority voting is employed for decisions regarding management of the organization. This includes the application of provisions in the Agreement which impose specific obligations on member countries (I.E.P., article 61). Majority voting is also employed for decisions on procedural matters and for recommendations put forward by the Governing Board (I.E.P., article 61). In the I.E.P. Agreement, majority vote is defined as 60% of general voting weights (i.e. 60% of IEA countries) and 50% of the combined voting weights (i.e. general voting weights plus oil-based voting weights) (I.E.P., article 61) (Wilson, 2016, p. 9).

Unanimity voting is rare and is only carried out if the decision will impose new obligations on participating countries that are not already specified in the Agreement (I.E.P., article 61). This can take place in form of revisions of the I.E.P. Agreement, new tasks for the organization, changes in voting weights or changes in the scale of financial contributions (Wilson, 2016, p. 9).

5.6 Financial Arrangements

As an external organ of the OECD, the IEA has its own budget. The size of the IEA budget and the scope of its work is known as the "Programme of Work and Budget" and is determined every two years by the IEA member countries (IEA/Structure, 2021). In 2018, the annual budget of the IEA was EUR 27,849,686 ²¹ (IEA/Structure, 2021). The agency is mainly funded by its members, and the financial contributions are based on a similar formula as discussed for voting weights above. This formula (adopted from the OECD) calculates each country's contribution based on the size of its economy (Wilson, 2016, p. 10). The US and Japan are the largest contributors, accounting for about half of the regular contributions.

Funding has been a challenge for the organization since the 90s. This can partly be explained by the fact that national governments has exercised budget retrenchment on almost all international organizations (Van de Graaf & Lesage, 2009, p. 306). In nominal terms, the budget was almost flat in the years between 1995 and 2004 which means that the actual budget declined (Bamberger, 2004; Van de Graaf & Lesage, 2009, p. 306). Due to insufficient funding, the organization has become dependent on voluntary contributions from its member countries or from other stakeholders (Van de Graaf & Lesage, 2009, p. 306). About 25% of the IEA's budget is provided by the United States, and about 24% by Japan (Bamberger, 2004).

In 2017, about 30% of the IEA spending was provided through voluntary contributions, which mostly came from government sources (IEA/Structure, 2021). Voluntary contributions are often earmarked for specific purposes⁹ and must be approved by the Governing Board since they might interfere with the actions of the organization. Wilson points at two voluntary contributions that have been groundbreaking for the IEA's scope of work. First, a UK government contribution with additional funding to foster energy dialogue with China (exact year and amount of contribution is not stated). Consequently, the British are heavily involved in determining the content of the organization's China work (Van de Graaf and Lesage, 2009, 307). Secondly, in 2009, the G8 countries earmarked a significant voluntary contribution to promote studies on renewables and energy efficiency (G8 call for increased investment, 2009; Van de Graaf & Lesage, 2009, p. 312; Wilson, 2016, p. 10). These, and other

²¹ After a webpage update, the annual budget is no longer available on the IEA webpages.

contributions from the G8 forum, have arguably set the conditions for the way forward for the organization.

Other revenues of the IEA stems from the agency's statistics and publications. These kinds of revenues contribute to nearly a quarter of the annual income (Wilson, 2016, p. 10). Today, individual reports are written within all energy sources, within most technologies and for most countries. This will be considered in more detail in section 5.7.

Finally, it is worth mentioning that the IEA has also received voluntary contributions in terms of "staff on loan" from national administrations or energy companies in the IEA countries (Wilson, 2016, p. 10). Keohane explains this as a deliberate choice by the IEA founders to ensure rotation of expertise between the IEA and member country administrations (Keohane, 1978). It can also be understood as a slightly more indirect way of influencing the organization's focus and priorities.

5.7 Knowledge Production

As we recall from chapter 3, the success of an epistemic authority depends on its recognition as an authority worth observing. In the case of the IEA, the element of "worthiness" lies in its ability to produce credible information and to decisively influence the formation of knowledge on energy issues.

Over the years, the IEA has published thousands of publications, mainly analyzes in form of reports, but lately also articles and commentaries (*IEA/Analysis*, 2021). Current issue scope covers topics such as climate change, energy technology collaboration, energy investment, energy efficiency, energy security, and outreach to «all the world», especially major producers/consumers such as China, India, Russia and the OPEC countries (*IEA/Areas of Work*, 2021).

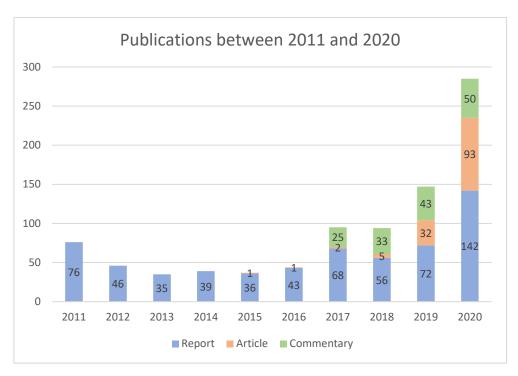


Figure 2. Number of IEA publications last ten years²²

Figure 2 illustrates a clear increase in the number of publications during the last few years, mainly from 2017 and onwards which was the year when the IEA was appointed custodian agency for tracking the progress on SDG7. The huge peak in 2020 can be explained by the two new mandates of «Tracking Clean Energy Progress» and "Tracking Covid-19" development in the energy sector. The IEA's *Tracking Clean Energy Progress* (TCEP) reports assess the status of 46 critical energy technologies and sectors and provides recommendations on how they can get 'on track' with the Sustainable Development Scenario (SDS) from the WEO (*IEA/Tracking Clean Energy Progress*, 2021). The tracking of the impact of the covid-19 pandemic on clean energy progress in 2020 and beyond is a subproject of the TCEP project (*IEA/Covid-19 impact*, 2021). Together, these two projects account for 41 and 19 reports in 2020, respectively. For many years to come, the IEA will provide statistics on both clean energy progress in general, and with regards to how the covid-19 pandemic is impacting current and future progress on clean energy.

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²² Data from 2010 was not available in the IEA achieve.

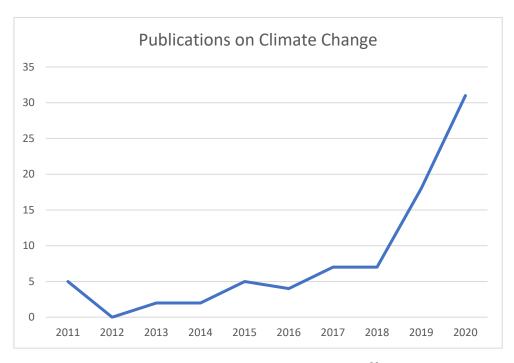


Figure 3. Publications on climate change last ten years ²³

Figure 3 shows all publications in the IEA archive from the category "Climate Change". Interestingly, this curve is almost in perfect agreement with the curve in Figure 2 which means that these two should probably be seen in context. The fact that the IEA chose to publish this many reports, commentaries, and articles on climate issues indicates that the shift in focus supporting green transition is more than a symbolic legitimation strategy. Energy transition has truly become a part of the organization's new identity, or scope of work.

One of the IEA's flagship publication is the annual *World Energy Outlook (WEO)*, published for the first time in 2002. The WEO models various scenarios for the future of energy sources and energy markets and is purchased by politicians and industry actors all over the world. The report aims at "informing the international community with key quantitative analyses, including annually-updated energy access databases, projections and estimates of the investment needs and implications for global energy use and carbon-dioxide (CO₂) emissions of universal energy access" (*IEA/Defining energy access: 2020 methodology*, 2020).

The scenarios included in the annual WEO varies to some extent in line with

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²³ Data from 2010 was not available in the IEA achieve.

developments in the society. The last years, much more attention has been devoted to renewables, energy efficiency, and climate change. These are key topics in the global energy discourse. To keep these topics "warm", and in order to staying relevant in the global discourse, the IEA included a *Sustainable Development Scenario* for the first time in the WEO2017. This scenario is meant to outline an integrated approach to achieving internationally agreed objectives on climate change, air quality, and universal access to modern energy in line with SDG7.

In the latest WEO2020, the IEA replaced the familiar «Current Policies Scenario» (how the future will look like if the world continues along the same path without any additional policy changes) with a «Net Zero Emission by 2050» case which includes a modelling of what would be needed in the next ten years to put global CO₂ emissions on track for net zero by 2050. This offensive move towards a carbon free future has to do with the fact that two-thirds of the IEA member countries committed themselves to a promise of net-zero emissions by 2050 in the UN Climate Change Conference (COP25) in Madrid in 2019. WEO2020 also offeres a «Delayed Recovery Scenario» to reflect on the uncertainties linked to the implications of the pandemic on the global economy.

Other flagship reports found in the IEAs archive are the Oil Marked Report, the Global Energy Review, the Electricity Review, and the Energy Technology Perspectives. Most publications from the last ten years are available on the IEA's webpages, some free of charge and others available for a fee. Either way, subscription is often required. If you wish to retrieve older publications, these can be found in the digital OECD library which requires payment login.

5.8 Relations with Key Actors

The IEA-OECD relationship is unique in that it is institutionalized in the I.E.P. Agreement. Although the IEA was established in the framework of the OECD, it was crucial for the founding members to create the IEA as an autonomous agency without legal dependence on the OECD for important decision making and procedures as explained in section 5.1. In May 2016, Reuters published the story "OECD and IEA ponder divorce after years of friction". The friction was supposedly a result of resistance to OECD rules on administration and "decades of disagreement" over cooperation with China, according to a document seen by Reuters

(Felix & Lewis, 2016). The China-dispute touches upon a delicate theme for many intergovernmental organizations that are committed to democracy and market economies. The IEA wish to erase this artificial divide and work more closely with strategic emerging economies, independent of their political system. When the IEA started negotiating with China in 2016 to establish an IEA center in Beijing, it supposedly created strong dissatisfaction among the OECD leadership. It is uncertain how this situation has developed since 2016, and there is little information to be found in media. What is certain, however, is that the IEA and the OECD are still bound together by the I.E.P. Agreement and will remain so until the member states should decide on a separation.

The IEA-EU (former European Community (EC)) relationship had an ambivalent start as the new energy agency was established only a month before a common European energy policy was supposed to be adopted by the EC (Van de Graaf & Lesage, 2009, p. 307). As a result, the new European energy policy was never launched to some countries great dissatisfaction. This was particularly disappointing for France as the initiator of the new policy. Instead, the EC decided to cooperate on energy policy through multilateral, intergovernmental cooperation in the new energy agency (Van de Graaf & Lesage, 2009, p. 307). According to Van de Graaf and Lesage's "35 years of retrospect from 2005", the tension related to the development of the IEA still lingered more than three decades later (Van de Graaf & Lesage, 2009, p. 307). The turbulent situation between the founding members of the IEA and the EC in 1973/74 is well accounted for in a major study on energy supply security and geopolitics, published by CIEP ²⁴ in 2004. An important factor that explains the conflict stems from the fact that the US initiative to establish the IEA excluded many of the EC members. It also led to division between those countries in favor of developing a common European energy policy and those that claimed an autonomous intergovernmental organization was a better choice. Another delicate topic was the future relationship with OPEC if the IEA was established with a strong US leadership. The US was not known for friendly negotiations with OPEC, and France stood at the forefront to avoid a producer-consumer collision course with the Arab oil producing countries. The ambivalent relationship between the EU and the IEA seems to have subsided, and several more EU member states have joined the IEA as the years have passed. Studying press releases and

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²⁴ Centre International d'Etudes Pédagogiques (CIEP)

policy documents from the last decade leaves the impression that the two actors have a much more mutually respectful relationship today.

Another important relationship is that between the IEA and the G8 forum. IEA executive directors have been invited to attend G8 summits and ministerial meetings since 2005 (Van de Graaf & Lesage, 2009, p. 315). The summits and meetings bring together ministers responsible for specific policy areas to discuss mutual concerns. These events are important communication channels through which the IEA can influence key member countries but also channels where the members of the forum can influence the work of the IEA. In fact, the G8 forum is known to be an active agenda setter. Van de Graaf and Lesage claim that political impulses from the G8 forum, accompanied with generous earmarked contributions, have been crucial catalysts for broadening and reorienting the IEA's scope of work (Van de Graaf & Lesage, 2009, p. 312). If this is the case, it means that the exclusive «G8 club» has a considerable institutional power in the IEA which is clearly something that must be included in the legitimacy debate.

The IEA has also contributed extensively in energy policy discussions in G20 meetings. Van de Graaf and Westphal (Van de Graaf & Westphal, 2011, p. 28) argue that the G20 forum is better suited for leading energy dialogue than the G8 forum because the G20 forum includes both developed and developing countries that have strategic roles in the energy sector. Yet, the great differences between G20 member states in terms of energy mixes, market structures, import dependency levels, and exposure to climate change offers challenges (Van de Graaf & Westphal, 2011, p. 29). These differences clearly make it more challenging for the IEA to have the same level of influence in the G20 forum.

An actor with which the IEA has expanded its cooperation in recent years is the International Renewable Energy Agency (IRENA). When IRENA was officially founded in Bonn in 2009, it was a potential rival to the IEA. The founders of IRENA accused the IEA of undermining the potential of renewable energy sources and for its supportive stance on fossil fuels and the nuclear power industry (Van de Graaf, 2013, p. 16). Unlike the IEA, IRENA's core mission has always been to support countries in their transition to a sustainable energy future. Today, the work of the IEA and IRENA is far more coincident. The two agencies collaborate on data and statistics, renewable energy technology costs, and renewable policies, and they have developed a joint database of policies and measures for renewable energy (IRENA. International Renewable Energy Agency, 2020). In 2012, the

organizations signed a partnership agreement aiming at enhancing collaboration. A few later, the organizations were appointed partner custodian agencies for tracking SDG7 targets, and in 2019, the two organizations signed a "Memorandum of Understanding" building on the previous partnership agreement (*IRENA*. *International Renewable Energy Agency*, 2020).

Another interesting relationship that I only intend to mention as a digression is the relationship between the IEA and its member countries. As an intergovernmental organization gains more authority, it is known to compromise the sovereignty of the individual member states. Thus, there is reason to believe that the IEA's relationship with its member countries is also in a phase of development.

5.9 Concluding Remarks

This empirical analysis of the IEA provides a solid basis for assessing legitimacy based on a rational evaluation of institutional features of the organization. It also gains insight into the legitimation process employed by the IEA intended to shape legitimacy beliefs among its audiences. As the analysis progressed, we saw more and more contours of a legitimacy narrative emerge. It also became clear that some institutional qualities, or sources of legitimacy, stood out in particular. These were mainly expertise, efficiency, problem-solving, and collective gains which we recognize as purposive qualities from the matrix in Table 1. These are the main "take home lessons" from the in-depth analysis:

- Efficiency: Much of the IEA's efficiency can be explained by its origin and legal nature. The fact that IEA was established as an autonomous organization in the framework of the OECD was built on the rationale of becoming a quickly operational organization that could provide *efficiency* to policy making on energy issues. The voting system in the I.E.P. Agreement is designed to safeguard this ability to bring forth efficiency in decision-making processes. Lately, the IEA has also been concerned with sharing practices that bring efficiency to national policy-making which has lifted the idea of efficiency to another level.
- Expertise: IEA's expertise first and foremost assert itself in the form of knowledge production. This has always been the main task for the

- organization. Today, the IEA produce knowledge within *all* sources of energy and related energy technologies through an impressive amount of reports, articles, and commentaries. The new custodian agency responsibility and the covid-19 pandemic led to a huge increase in number of reports in 2020 as part of the «Tracking Clean Energy Progress»-program.
- Problem solving: The IEA has gone from being a knowledge-producing authority to also becoming much more of a problem-solving authority. This is reflected in the many publications, press releases, and participations in global dialogue where the IEA not only identifies and describes a problem but also provides a solution on how to best solve the problem. The IEA's *Tracking Clean Energy Progress* (TCEP) with specific recommendations on how nations and the global society as w whole can get 'on track' with the Sustainable Development Scenario (SDS) is an example of this.
- Collective gains: The IEA has shifted focus from being primarily concerned with providing energy security to its member countries to pursuing collective gains for the global community. Energy security is still a number one priority, but the objective has evolved to the global level where the purpose is to ensure access to modern energy for *all*. Here we touch upon the concept of *impartiality* that Zürn describes in the global governance theory. Within law, one often associates impartiality with the practical meaning of "like cases must be treated alike". Impartiality in the global governance system is not necessarily about impartiality in decision-making processes, but rather to pursue the underlying social purpose in an impartial way (Zürn, 2018, p. 69). This shift in focus away from the traditional "us versus them" has been an important part of the legitimation strategy employed by the IEA

These four qualities I just outlined are the main ingredients in the technocratic narrative as we learned in the theory chapter. The IEA therefore seems to be essentially legitimizing its exercise of authority by using qualities from the technocratic narrative.

6 Media Content Analysis

The institutional in-depth analysis in the previous chapter provided an overview of the features of the IEA and how these can form the basis for assessing legitimacy of an epistemic IO authority. But very few individuals possess knowledge, time and capacity to rationally evaluate IO features independent of how these features are communicated, contested and justified in public discourse (Tallberg & Zürn, 2019, p. 17). Individuals may instead choose "cognitive shortcuts" by exposing themselves to the way quality newspapers frame and persuade the public opinions through media communication. A critical task for any IO is therefore to make sure that their chosen legitimation strategy is mirrored in the media in the most accurate way possible. Hence, the IO must strive to convince the audiences that their actions are worth observing and that their authority is appropriately exercised. In 2009, the IEA failed in this aspect and was thrown into a "discursive battle" between various actors. This will be the starting point of the media content analysis.

6.1IEA Accused of Misrepresentations of Facts

"Key oil figures were distorted by US pressure"

This was the alarming headline in the Guardian on November 9, 2009 (Macalister, 2009). A senior official in the IEA had reached out to the newspaper with allegations towards the estimates related to future oil production and "peak oil". It was especially predictions in the last year's WEO that were criticized. In WEO2008, the IEA predicted that the oil production was likely to increase from the current level of 83 million barrels a day to 105 million barrels a day. The senior official claimed the organization had deliberately underplayed what he called "the looming shortage" of oil for fear of triggering panic buying. Panic buying could in turn harm the financial marked and put an end to US supremacy as it would threaten US power over access to oil resources, he claimed.

A former senior official in the IEA also lifted the veil and claimed it was "imperative [for the organization] not to anger the Americans". He believed the world was already in the top oil peak, a belief that was supported by several external critics. Former British parliamentarian John Hemming, chair of the all-party parliamentary group on oil peak and

gas, also contributed in the much-discussed article in The Guardian. He admitted he was not surprised to hear about these allegations. He even said he had been contacted by some IEA officials that were unhappy with the lack of independent scepticism over the IEA predictions.

The accusations from the two "whistle-blowers", and the support from the British parliamentarian, was not an isolated "breaking news" criticism. From its inception in 1974, the IEA has on several occasions been criticised for being a fossil-fuel friendly organization. In the coming sections I will map the global energy discourses the way it has been presented by some of the world's largest quality press newspapers in the ten years that followed the serious allegations towards the IEA. The method for data collection was described in section 4.3.1. As a reminder, the chosen time period was Jan 1-2010 to Dec 31-2020, and the chosen newspapers were The Guardian, The Times, New York Times, Washington Post, Le Monde, and Le Figaro. All news articles refer to the IEA in some way.

6.2A "Darling of the Press"

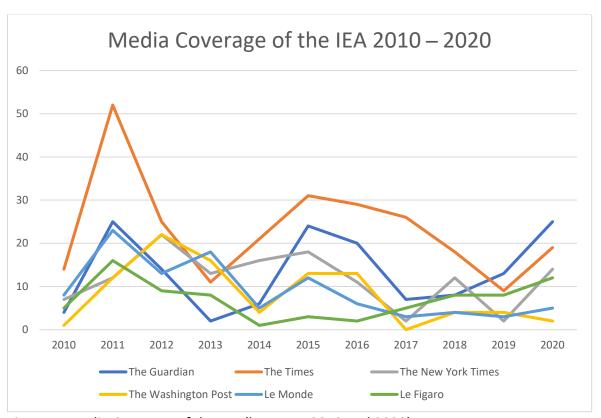


Figure 4. Media Coverage of the IEA (between 2010 and 2020)

When looking at the data, the first thing that can be established is that the IEA is a muchcited organization in both European and American quality newspapers (Figure 4). One can also establish that although the centrist-left newspaper The Times has far more citations than the other newspapers, there is no clear pattern between political alignment of the newspapers and number of citations. The most interesting about this graph, however, is that one can clearly see three peaks in media coverage, one in 2011, one in 2015, and one in 2020. Two of these peaks (2011 and 2020) can be linked to global and regional crisis that strongly affected the energy sector, while 2015 was a year of exceptionally strong global dialogue due to the UN Conference on Climate Change in Paris (COP21). As we recall from chapter 2, the IEA played a key role in developing SDG7 as well as informing the global community with statistics and data on energy related issues from all parts of the world. I will come back to these contextual situations in Figure 6.

A curiosity is that the American newspapers have its peak one year after the European newspapers. When I confer with my qualitative data material it becomes clear that this can be explained by several events. One is the shale oil boom in the US and the IEA longterm forecast that the US in few years would exceed Saudi Arabia in oil production²⁵. According to The News York Times on 14 November 2012, this statement led to a clash between the OPEC secretary general, Abdalla El-Badri, and the executive director of the IEA, Maria Van der Hoeven, at the Oil and Money Conference convened in London by the International Herald Tribune and Energy Intelligence. Mr. Abdalla El-Badri immediate response to the surprising IEA prediction was as follows: "Please don't give this message to the market. They don't want to invest in something they don't see". This short illustration shows that "knowledge is power". The IEA statement is only one in a series of many statements in the data material where the IEA influences the global energy discourse and consequently also influences the energy market. Not surprisingly, this tension between two great energy actors and the uplifting news about the US energy future, triggered excitement in US media. The WEO2012 revelation that the US would become the largest oil exporter in the world by 2017 was another trigger. This statement was a game-changer for the energy industry and resulted in a powerful upheaval among investors. A third reason was the US sanctions on the oil-giant Iran due to its much-disputed nuclear program. This decision got enormous attention in the American newspapers, and the IEA served as the expert organization monitoring the situation in Iran.

²⁵ IEA report "Golden Rules for a Golden Age of Gas".

6.3A Neutral Relationship

Even though Figure 4 and the examples above demonstrates that the IEA has "stuck its neck out" a lot in recent years, there is little indication that the criticism from 2009 has gained a strong foothold in the media. Figure 5 shows that negative coverage of the IEA is almost a "non-topic" in media context, and that the intensity of positive and negative legitimation statements is barely visible on the graph.

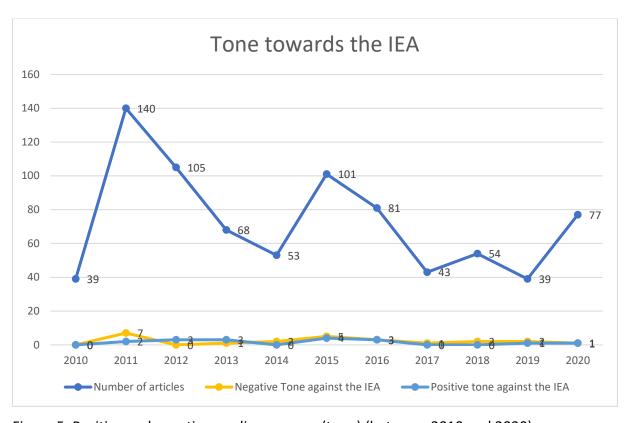


Figure 5. Positive and negative media coverage (tone) (between 2010 and 2020)

An exception can be seen in 2011 where a small peak appears. The British newspapers The Times and The Guardian accounted for 4 and 2 of the 7 articles with negative publicity this year, respectively, while The New York Times accounted for the last. On 1 June 2011 The Guardian published an article by Blake Alcott in the Guardian Leader Pages with harsh IEA criticism:

Fatih Birol of the International Energy Agency is right to have lost hope that greenhouse gases can be reduced before global average temperature climbs more than two degrees. But one reason they cannot be reduced is that the climate policy of energy efficiency, continually propagated by the

IEA and virtually all other policymakers, has been a case of barking up the wrong tree: whatever energy is saved on a Tuesday through technical efficiency is consumed on the Wednesday for further economic activity and a larger number of economic actors. Birol knows this, yet he repeats that we must redouble our efforts for efficiency and "clean" technology. In fact, only caps on the offending substances will do the trick, yet we have wasted two decades on non-solutions. Can the IEA not finally doubt its policies?

The criticism in The Times in 2011 was related to the controversial IEA decision to release 60 million barrels of oil from strategic "emergency stocks". Talks with OPEC ahead of the release had failed, so the IEA took matters into its own hands. Once the decision was made, the OPEC countries accused the IEA of becoming a political actor intervening in the market. But OPEC countries were not the only ones questioning the decision. There was also criticism from within the IEA's own chambers. On 23 June 2011, Business Editor Ian King, raised doubts about the IEAs' real motives behind the release of strategic stocks. Earlier the same day, IEA's executive director Tanaka had announced that "Today, for the third time in history of the International Energy Agency, our member countries have decided to release stocks". In his Commentary, King is quick to claim that the release is nothing more than a political decision. Three days later, Dominic O'Connell continued with the same argumentation. In a Business article he writes that several analysts suggested that the real motives for the IEA was "to shore up the West's faltering economic recovery". Other analysists O'Connell referred to in the same news article was more supportive and claimed that "The IEA does not play that kind of games" and that they had only "filled the gap" [left by Libya].

The IEA itself responded to the contestation by stressing that its decision to release stockpiles was *not* a political decision. They stuck by the official statement that the release was meant to replace production loss in Libya, and that it was "a move that would contribute to well-supplied markets and a soft landing for the world economy" (quote by Mr. Tanaka on the day of release in The Times). No matter the real motive for this intrusive decision, the IEA was sending a message to the market that they were not willing to risk high oil prices threatening economic recovery.

Although these examples may seem serious enough, they only make up a small fraction of the total amount of news articles. All in all, the *lack* of positive and negative legitimation statements in quality press media shows that the newspapers have a *neutral* relationship to the IEA as a knowledge provider.

6.4 Adding Contextuality to Media Coverage

The peaks in Figure 4 cannot be explained without adding contextuality to the picture. Figure 6 shows that the peaks in media coverage (blue graph) correspond with two crises in the energy sector that had major impact on the global society in the selected ten-year period (yellow graph).

I 2011, the Libyan Civil War broke out and shocked the entire energy sector. In 2020, the unexpected Covid-19 pandemics paralyzed not only the energy sector, but all sectors as the world closed down to combat the virus. To try to understand the media peak in 2015 I had to add the global dialogue variable (grey graph) showing that global dialogue had a peak in 2015 which has never been higher during the ten-year period. The qualitative data from the media content analysis show that a large share of the global dialogue in 2015 was connected to COP21 and the Paris Agreement/Agenda 2030 (legally binding international treaties on climate change).

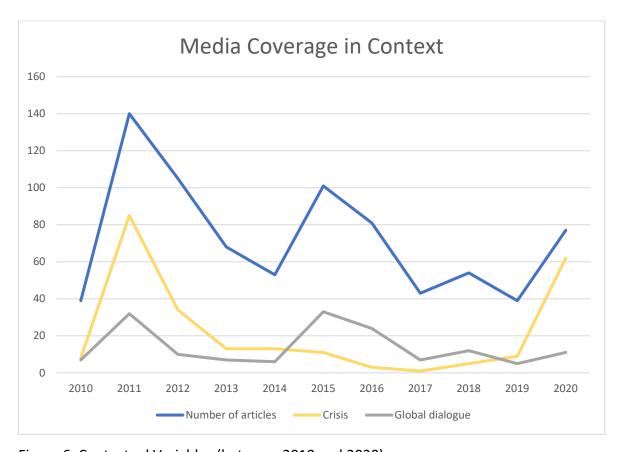


Figure 6. Contextual Variables (between 2010 and 2020)

6.5 Share of Sources of Legitimacy

The IEA's main task has always been to provide its members with expert data and statistics concerning energy related issues. Thus, it was no surprise that expertise scored by far the highest among the technocratic sources of legitimacy. In fact, most articles refer to the IEA's knowledge production when the organization is cited in media. We see this clearly as the red graph (expertise) follows the blue graph (overall number of articles) throughout the entire decade. A discrepancy can be observed in 2011 when the IEA, according to some, stepped out of its role as a knowledge producer and into a temporary "political role" by releasing strategic stocks to solve an impending energy crisis.

Far from everyone agreed that this act of "problem-solving" could be defended as a collective gain. For this reason, collective gains score relatively low in 2011 when compared to problem-solving. These two variables should ideally follow each other very closely. Of cause, there are plenty of room for interpretation and disagreement in this particular case. In my data, the oil consuming countries *need* for lower oil prices and increased oil production to restore "western economies" is not coded as collective gains, whereas articles where the IEA bases its decision on "global economic recovery" is coded as collective gains.

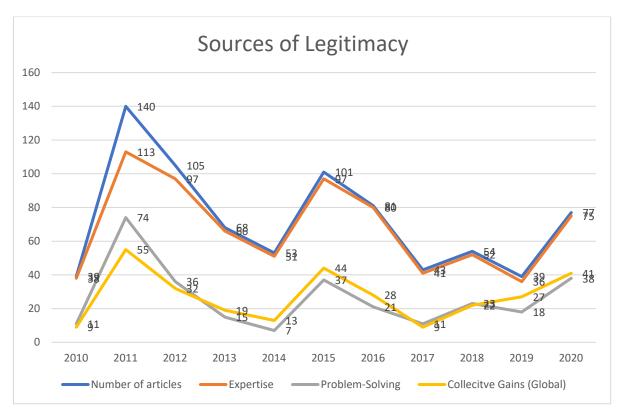


Figure 7. Sources of legitimacy (between 2010 and 2020)

Furthermore, Figure 5 shows that the IEA has emerged as a problem-solver also during the covid-19 pandemic and during the Paris Agreement negotiations. It appears that the IEA becomes more concerned with providing a solution in times of crisis, instead of just stating the facts.

When I supplement with qualitative data from the media content analysis, I see that underlying social purposes such as "fighting climate change" accounts for a great share of the referrals to collective gains throughout the decade. This indicates that climate concern is nothing new for the IEA even though Figure 2 in the in-depth analysis showed that it was not until 2017 that publications on the topic gained momentum. "Global economic recovery" as a collective gain is particularly prevalent in 2011 and 2020 where the two crises, as well as ripple effects from the Financial Crisis, had a stronghold on the global economy.

6.6 Focus on Fossil Fuel versus Non-Carbon Fuels

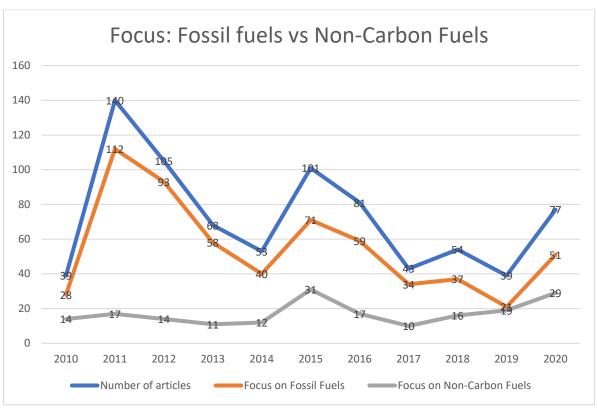


Figure 8. Focus on fossil fuels vs non-carbons (between 2010 and 2020)

A question that arose early in preparation process was whether the IEA had shifted intensity and tone in the way they refer to different sources of energy. The IEA has repeatedly been

referred to as a fossil fuel friendly organization over the years, but has this changed during the last decade? This curiosity inspired the two variables "Focus on Fossil Fuels" and "Focus on Non-Carbon Fuels". These have clearly not been the easiest variables to measure. In many cases, referral to the IEA is not directly related to any specific fossil fuel related story. Instead, they might refer to "the need for electricity for the developing world", "the development of an electric European car fleet", or "carbon capture projects" (which in itself is a case of doubt). Climate concern was often main topic even though the article did not specifically refer to renewable energy sources which one might expect. In such cases, I chose not to code for either fossil fuels or non-carbon fuels. Thus, the red and gray graphs in Figure 8 only represent articles where there has been a direct referral to either fossil fuels or non-carbon fuels. When fossil fuels or non-carbon fuels were mentioned in the same article, and the focus was fairly similar, these were "checked off" in both variables.

The reason why I chosen to call one of the variables "Non-Carbon Fuels" instead of "Renewables" is that I wanted to include nuclear power as a "clean" source of energy since it is virtually free from CO₂ emissions and not a direct threat to the climate. It is also no secret that the IEA believes that nuclear power is needed to achieve the climate goal of not exceeding 2 degrees warming by the end of the century (a statement backed up by qualitative data from the media content analysis).

So far I have accounted for the number of times the IEA is either quoted or referred to in connection to articles with a special focus on fossil fuels or non-carbon fuels, but I have not said anything about whether or not the tone has changed. For that I need to confer with data from the qualitative part of the media content analysis in search for more details. What I found was that in times of crisis, the IEA is constantly returning to one of its main missions, namely *energy security*. In the years following the Financial crisis, the IEA encouraged all kinds of energy investment apart from coal that had been established as "the dirties of the dirty" energy sources. As we approach 2015, the tone changes significantly. There is still a very strong focus on energy security, especially for the developing world, but now with a clearer invitation to the renewable sector. Nevertheless, the message from the IEA seems to be: Until renewable energy has managed to fill the void left by coal production and declining nuclear power, we will also need more oil and gas investment.

In the years between 2015 and 2020, renewable energy sources continued to have a strong upswing, but fossil fuel projects made it even better worldwide. This is mainly due to

the enormous energy needs of the populous countries of China and India. Although China according to the IEA has gone from being a poor student in the renewable class to becoming one of the best students, the country also built several large coal power plants during this period to ensure what seemed to be an ever-increasing energy demand from the Chinese population.

"Energy efficiency" measures seems to be one of the IEA's strongest pieces of advice for reducing unnecessary emissions in a world that is still dependent on fossil fuels. This concept had a new revival after 2015 and is frequently included in the global energy discourse during the last years. Examples from the data material is encouragement (by the IEA) to build more energy-efficient buildings, use more energy-saving air conditioning, or to improve energy efficiency in the fossil fuel industry. In WEO2019 the IEA even pointed at "A sharp pick-up in efficiency improvements is the single most important element that brings the world towards the Sustainable Development Scenario". But even energy efficiency falls short when the overall global mission is to stop irreversible damage on the climate in accordance with climate goals. In 2019, the IEA saw the need to issue a "cry of alarm". If the world did not change course immediately and managed to foster more political will, the climate goals would be far out of reach. Le Monde (7 November 2019) quoted Birol saying "There is no excuse for inaction", while Le Figaro (13 November 2019) quoted Birol saying "The imperative to reduce greenhouse gas emissions requires the creation of a grand coalition bringing together governments, investors, companies, and anyone wishing to fight against climate change "

Unfortunately, covid-19 emerged from nowhere and put a damper on political will to prioritize climate policies. The covid-19 crisis showed very clearly that *virus trumps climate*. Although CO₂ emissions fell sharply during the most intense months of the shutdown, qualitative data from my analysis indicate that many countries have abandoned their promises from 2015 and were in 2020 much more concerned with national economic recovery. 27 May 2020 The Guardian cited Birol saying "The crisis has brought lower emissions but for all the wrong reasons". As he had warned before, we usually see a CO₂ emission slowdown during a crisis, but this is usually followed by a rapid increase in CO₂ emissions as soon as the crisis is under control. "If we want to achieve a lasting reduction in climate change", he says, "then we need to see a rapid increase in clean energy investments" and "right government policies".

From the very beginning of the covid-19 pandemic, the IEA stepped onto the podium and called on the world leaders and industry to use this opportunity to shift to a green energy transition. I myself attended a digital IEA Clean Energy Transition Summit on 9 July 2020 ²⁶ with an impressive list of 40 Ministers from all over the world on the list of guest speakers contributing to the program. In the opening speech, Birol emphasized on the fact that the IEA had been the *first* actor to call for a sustainable economic recovery". The political leaders had been invited to reflect on predefined topics, and Birol asked questions related to these topics during the conference. No less than 500 000 people attended the conference directly that day. Here we saw a concrete example of IEA setting the agenda for the global energy dialogue, and for determining what should be the top political priorities.

For an organization that initially was set up to coordinate the action of oil consuming countries of the West, an advice to turn away from fossil fuel production and consumption was unthinkable just a couple of decades ago. This dramatic change in focus clearly shows that the IEA is genuinely concerned about reaching the climate goals that they themselves have been involved in designing.

6.7 Referral to IEA Experts

At first glance, there are few surprises in Figure 9. As the degree of media coverage of the IEA rises and falls in the graph, so does referral to IEA experts (green columns). Referral to executive director also follows the same curve (grey columns). What is unexpected about this graph, however, is only realized when adding the qualitative contextual data. This tells us who *really* left their mark on media coverage throughout this decade.

In 2010, Nobuo Tanaka was executive director of the IEA before he was succeeded by Maria Van der Hoeven in 2011. Current executive director, Fatih Birol, picked up the baton in September 2015, and was re-elected in January 2018 for a second four year term which began in September 2019 (*IEA/Leadership*, 2021).

In the figure, we see that there are minimal discrepancies between referral to IEA expert, and referral to executive director in the period 2015 to 2020. This means that it is Fatih Birol who in most cases is either mentioned or quoted in quality newspapers in the last five the years.

²⁶ Link to program: https://www.iea.org/events/iea-clean-energy-transitions-summit

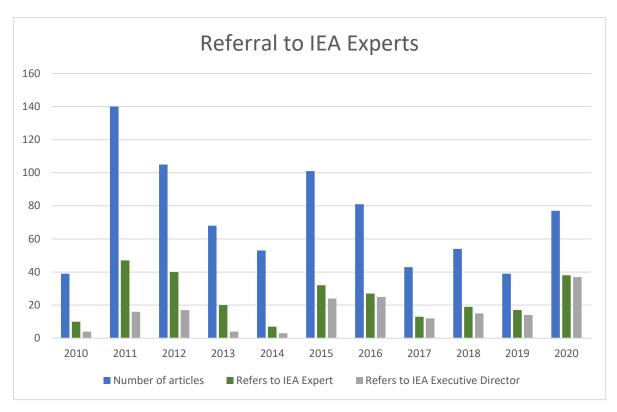


Figure 9. Referral to IEA experts (between 2010 and 2020)

When looking at the years 2010 to 2015, however, the situation is very different. Here there are large discrepancies between referral to IEA expert and referral to executive director. The data indicate that experts other than Tanaka and Van der Hoeven have been cited the most during their respective leadership periods. So, who were these other experts who contributed to the global energy discourse during these five years? It turns out that it was mainly the *current* executive director, Fatih Birol, at the time operating in his role as chief economist, who influenced the dialogue also between 2010 and 2015. This shows that Birol had a powerful voice in the global energy discourse even before he became leader.

6.8 Country-Related Differences in Media Coverage

When one has assembled such a large dataset from several newspapers in several countries, it is also exciting to see if there are any particular country-related differences one should pay extra attention to. Among the variables in the media content analysis, "Focus on Fossil Fuels/Non-Carbon Fuels", "Reference to IEA-expert" and "Sources of Legitimation" stand out as variables of interest that would add texture to the discussion.

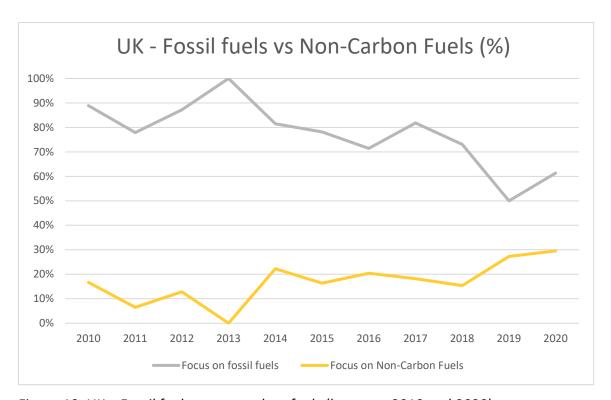


Figure 10. UK – Fossil fuels vs non-carbon fuels (between 2010 and 2020)

The British newspapers have a very high proportion of news articles referring to oil marked related news for most of the decade as seen in Figure 10. The Times in particular, constantly publishes articles on oil prices, oil demand and oil production with reference to the IEA's monthly oil market report and other oil statistics. In the run-up to the UN Conference on Climate Change in 2015, the global energy discourse is changing remarkably. At a general level, the IEA is often cited in relation to overarching topics such as energy transition, climate change, and COP21 in the years 2014-2016. The British newspapers, on the other hand, seem to be the newspapers that have covered the IEA's engagement in energy transition the least in this period. The Times must take most, if not all, the blame for this. While The Guardian has as many as 18 references to COP21 these years, The Times has only 1²⁷, which constitutes 36 and 2 percent of the total, respectively. The same years, The Times has only six articles focusing on climate issues. In other words, it seems that COP21 and global climate concern have gone almost unnoticed in The Times these years. For the rest of the decade, Figure 10 shows a steady increase in news articles covering the IEA in relation to non-fossil fuels. The peak in 2020 is mainly accounted for by The Guardian, while the Times continues to cover news related to the oil market in traditional style.

 $^{^{27}}$ Disclaimer: some references to either COP21 or climate issues might have been missed.

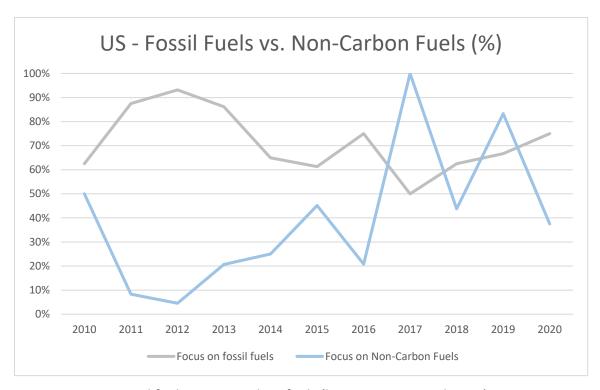


Figure 11. US – Fossil fuels vs non-carbon fuels (between 2010 and 2020)

Figure 11 indicates that the American newspapers started the ten-year period with a strong focus on non-carbon fuels. This is a truth with modifications and can probably be better explained with very few references to the IEA in 2010 (only 8 articles in total). In 2011, the IEA announced "The Golden Age of Gas", as well as a "US shale oil boom". These headlines accelerated media coverage that referred to IEA expertise in connection with the oil and gas sector. Although the US keeps up the pressure on oil and gas related news for the rest of the decade, IEA citations in connection with renewable energy sources get some extra attention in 2015. The two extraordinary peaks in 2017 and 2019 can be explained by *very* few articles referring to the IEA in the chosen American newspapers these years. The top in 2017 accounts for 2! news articles with focus on non-carbon fuels, while the peak in 2019 accounts for 6. The data is still interesting because despite few articles these years, they *do* have a focus on non-carbon fuels which may affect the audience's belief in the IEA as an IO concerned with clean energy transition.

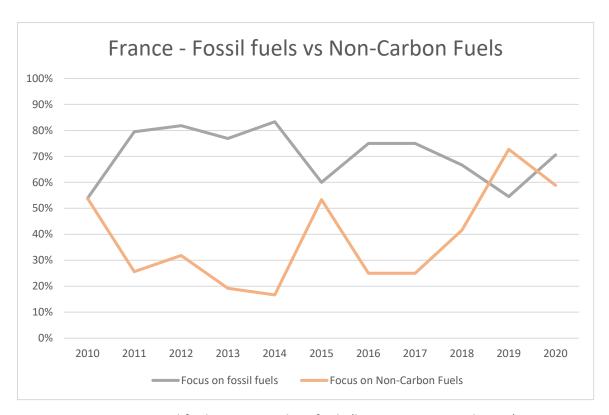


Figure 12. France – Fossil fuels vs non-carbon fuels (between 2010 and 2020)

The first years of the decade, the French newspapers (Figure 12) had significantly higher focus on non-carbon fuels than the British and American newspapers. Much of the French focus on non-carbon fuels is better understood when we take a closer look at the country's energy mix. Nuclear power has for many years been the largest source of electricity in France. Fresh data shows that it accounts for 70.6% of the country's total electricity production of 537.7 TWh (*PRIS Power Reactor Information System*, 2021) which is the highest percentage in the world (*Nuclear share figures, 2009-2019*, 2020). At the moment, France has 58 operational power-plants, and one under construction²⁸ (*Nuclear Power in France*, 2021). When I confer with the qualitative data from the media content analysis, I see that there is a much greater focus on nuclear, but also a greater focus on renewable energy sources in general in the French media. As for the other newspapers, much of the IEA related dialogue in 2015 concerned topics such as energy transition and climate change which

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²⁸ For comparison, the UK generates about 20 % of its electricity from nuclear, but almost half of current capacity is to be retired by 2025 https://www.world-nuclear.org/information-library/country-profiles/countries-t-z/united-kingdom.aspx. The US on its side generate about 19.7 percent of its electricity from with 93 operational power-plants. The contribution of nuclear energy is significantly higher in France, despite the country having reactors in operation. (https://www.statista.com/statistics/273208/nuclear-share-of-electricity-generation-in-the-us/; https://pris.iaea.org/PRIS/CountryStatistics/CountryDetails.aspx?current=US).

accounts for the noticeable peak in 2015. The impressive peak in 2019 shows that 8 (73%) of the 11 articles published this year focused on non-carbon fuels.

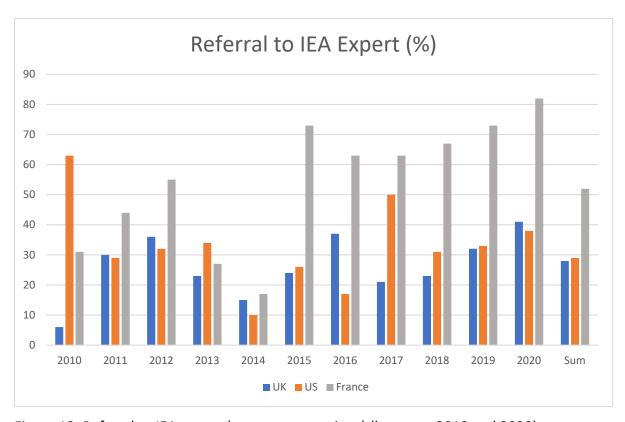


Figure 13. Referral to IEA expert (country comparison) (between 2010 and 2020)

The data in Figure 10, 11, and 12 make more sense when we look at the IEA's more "direct" contribution to media coverage these years in the form referral to IEA experts, see Figure 13. Overall, we see that the French newspapers have a much closer relationship to its source (the IEA) than both the American and British newspapers. As the focus on non-carbon fuels reaches new heights in 2019/2020, we also see that conferral with IEA expert is sky high in the French newspapers. This may indicate that the French newspapers are more concerned with conveying a more unfiltered voice of the IEA, or that the IEA, headquartered in Paris, uses the easily accessible French newspapers as a strategic tool to share both knowledge and expert advice with the French population.

Finally, I took a closer look at the share of sources of legitimacy that are reflected in the newspapers by country, see Figure 14. Despite differences in media coverage in terms of focus on energy sources (fossil fuels/non carbon fuels) and reference to IEA exerts, there is

surprisingly little difference in the share of legitimation sources in media coverage in the three IEA member countries which is particularly interesting for the up-coming discussion.

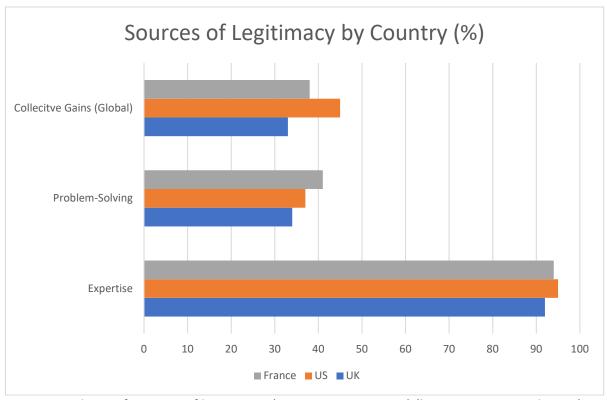


Figure 14. Share of sources of legitimacy (country comparison) (between 2010 and 2020)

6.9Three Different Leaders – Three Different Styles of Leadership

Towards the end of this chapter I would like to draw attention to the part of the IEA's "identity" that is based on leadership. In the qualitative data from the media content analysis, it became clear that the executive directors have played an important role in the organizations legitimation processes and efforts to create legitimacy beliefs. The three different styles of leadership also seem to have formed the IEA into the organization it has become today. In this section, some of the distinctive features of the three different leadership periods is highlighted.

6.9.1 Nobuo Tanaka – 1 September 2007 to 1 September 2011



Mr. Tanaka was in the final stages of his leadership period when my longitudinal analysis began in 2010. Nevertheless, he has succeeded in making his mark on the IEA's history. Tanaka came straight from a position as Director for Science, Technology and Industry at the OECD, and he had previously "held a range of posts of increasing seniority" at the Japanese Ministry of Economy, Trade and Industry Ministry, according a press release achieved

on the IEA webpages (*Nobuo Tanaka nominated to succeed Claude Mandil as IEA Executive Director in September 2007*, 2006).

One of his final task as executive director of the IEA was to call OPEC to increase its oil production during the Libya crisis, but a Business article in The New York Times on 20 May 2011 (a few weeks before the release of stockpiles) may indicate that it was no easy decision for the executive director. Instead, the article suggests that "The call for added production appears to be a move by the agency (...) to distance itself from the period under its departing chief, Nobou Tanaka". Apparently, many felt Tanka's leadership had been "too accommodating to Saudi Arabia" and that Tanaka had been "too content to accept the

Organization of Petroleum Exporting Countries narrative of blaming speculation, rather than market fundamentals, for high prices". The article continues with: "The agency's board also said it was prepared to consider using all tools that are at the disposal of I.E.A. member countries". This intrusive act in 2011 came unexpected to many actors in the global governance system and ushered in a more confrontational leadership style.

As leader, Tanaka seems to have had a very strong focus on economic growth, which coincides with the growth paradigm that underlies the work of the parent organization OECD. He talks little about climate. The relatively few references to Tanaka in my media analysis show a leader who communicates a mindset that what the West does to reduce emissions is of minimal importance (ref. Le Monde, 18 March 2011). The real problem lies in China and must be solved there. This was possibly a contemporary attitude at the time, but differs greatly from the leadership style and the attitudes the IEA represents today. Tanaka was succeeded in this role by the Former Minister of Economic Affairs of the Netherlands, Maria Van der Hoeven.

6.9.2 Maria Van der Hoeven – 1 September 2011 to 31 August 2015



As incoming leader, Mrs. Van der Hoeven "vowed a focus on excellence as the Agency strives to address the challenges of energy security and climate change in an era of unprecedented economic uncertainty" (Maria van der Hoeven begins term as IEA Executive Director, 2011). She also said she would bring "the organization's expertise and well-founded views to the table at the highest levels, in support of policy-making as well as to inform discussions with other

organisations and institutions". This statement may have been escalating the IEA's orientation out of the "membership ghetto".

Van der Hoeven came straight from a post as Minister of Economic Affairs of the Netherlands where she had been actively engaged in international dialogue on both energy

security and sustainability. In the articles where Van der Hoeven is mentioned or quoted in the data material, I get the impression that she was a more confrontational leader than both Tanaka and Birol. She openly criticized the coal industry, and she was not afraid to interfere in other countries' energy policies. In The Times, 3 June 2014, she is quoted with the following warning before another impending energy shortfall: "The reliability and sustainability of our future energy system depends on investment. But this won't materialize unless there are credible policy frameworks in place as well as stable access to long-term sources of finance". Clearly, Van der Hoeven does not talk primarily about renewables in this case. The IEA's general mind-set always seems to be based on energy security and a stable economy. Without these premises in place, conditions will not be favorable for either the fossil fuel industry or the non-carbon industry.

Van der Hoeven's leadership is perhaps best known for opening the door to the outside world. On 3 April 2013, Maria van der Hoeven issued the following statement regarding the IEA's co-operation with emerging economies:

As the global energy map is redrawn, the IEA's 28 member countries face many of the same energy challenges as key emerging economies, and we share a common interest in building a secure, sustainable energy future. This is why the IEA attaches such high importance to working with key emerging economies outside our membership like Brazil, China, India, Indonesia, Russia and South Africa.

Furthermore, she informed that "all of these countries attended the last IEA Ministerial meeting in 2011, and that all are invited to attend the next one," scheduled for November 2013. It was also in Van der Hoeven's leadership that the term "Association" came up as a suggestion to show the IEA's genuine interest to deepen their existing external partnership. The actual decision to go through with this, however, was not taken in her leadership period.

In the data material, there are pockets of information telling me about a more global mindset during this period. The data revealed that the IEA WEO flagship report went from being nick-named the "Energy Bible" to being referred to as the "Energy Atlas" in an article called "IEA goes Global". I also notice that the previous exclusory reference to "OECD countries" vs "non-OECD countries" have been replaced with "developing countries" vs "developed countries". Maria Van der Hoeven was succeeded by current executive director Fatih Birol.

6.9.3 Fatih Birol – 1 September 2015 and Still in Office



When Mr. Birol was introduced as executive director, he had already spent over 20 years at the IEA (IEA/Leadership, 2021) "rising through the ranks to the position of Chief Economist", according to the IEA leadership pages. He had already been supervising the successful WEO flagship report for many years, and he was the first executive director to be recruited from within the IEA's own ranks.

Before Birol came to the IEA, he had been

working at the Organisation of the Petroleum Exporting Countries (OPEC) in Vienna for several years. Unlike his predecessors, Birol has a more academic career path and was awarded a Doctorate of Science honoris causa from Imperial College London in 2013. Before that he had earned a BSc degree in power engineering from the Technical University of Istanbul and received an MSc and PhD in energy economics from the Technical University of Vienna (*IEA/Leadership*, 2021).

In a portrait of Birol in Le Monde, 12 November 2013, many interesting character traits of the IEA leader are highlighted. Among the people who contributed to the portrait was Birol himself as well as former IEA executive director, Claude Mandil, and Stephen Singer, director of energy policies at WWF. The author of the portrait was Jean-Michel Bezat et Gilles. "Most people probably don't know that Birol studied Cinema in Vienna before the numbers caught up with him with a thesis in economics devoted to energy", the article reveals. This thesis became his ticket into the OECD. After the euphoria of the two oil shocks, "OPEC was disillusioned", according to Birol, and "oil was trading at \$ 30 - 22.50 euros - a barrel". After that, Birol did not stay long. Instead he left the oil cartel and went to the IEA, the anti-OPEC club. But it was only when the post of chief economist was directly attached to the current executive director, Tanaka, in 2008, that he established himself as a heavyweight in the agency. Mandil and Singer both describe Birol as "workaholic" and "a

very good communicator». Singer added that Birol has changed during his years in the IEA. From repeatedly underestimating renewables in the WEOs, he has now taken renewables into account and become more of a friend of renewables instead of the enemy, he claimed.

Other achievements that did not go unnoticed in the media was that Birol has been named by Forbes Magazine as among the most influential people on the world's energy scene and that he was recognized by the Financial Times in 2017 as Energy Personality of the Year.

Birol's exceptional communication skills and knowledge is the main impression I am left with after having read and analyzed all the data material. I also noticed that Birol has become an alarmist during his years in the agency, something that might be explained by increased authority after 2015 and the mandate to monitoring the progress of SDG7. In the data material, there are numerous examples of Birol calling for governmental action to combat catastrophic and irreversible climate change, but not in a "point of finger" kind of way. His appearance seems more diplomatic.

6.10 Concluding Remarks

When I first though of doing a quantitative media content analysis, my plan was limited to mapping patterns of legitimation/delegitimation statements with regard to the IEA during the last ten-year period, stretching from five years before and five years after Agenda2030 was signed and provided a new roadmap within global energy cooperation. According to the global governance theory, an IO authority will face more contestation as its authority increases in the global governance system. I was surprised to find that there were hardly any contestation of the kind Zürn mentions in his book "A Theory of Global Governance" during the last ten years with regard to the IEA. If I had chosen to go ten years further back in time, however, it might have been a different case. My data would then have included the Iraqi invasion of Kuwait on 2 August 1990, which according to Bruce Riedel, senior fellow and director of the Brookings Intelligence Project²⁹, marked the beginning of America's "endless wars" in the Middle East. Additional ten years back in time would have included the

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²⁹ The Brookings Intelligence Project is part of the Brookings Center for 21st Century Security and Intelligence

devastating Iran-Iraq wars in the 80s. No matter the rationale behind these wars, both involved crisis in the energy sector and affected export to oil-consumers of the West³⁰.

Before turning to the discussion, I will provide a few takeaways from the media content analysis:

- The quality press newspapers in the three selected IEA member countries have a neutral relationship to the IEA as a knowledge provider above all. There is remarkably little criticism of the IEA between 2010 and 2020.
- IEA's appearance in media is most prominent in times of crisis and in years with particularly high focus on global dialogue with regards to climate and energy issues.
- The IEA has become a more alarmist body after 2015. Possible explanations can be
 new mandates that have followed in the wake of COP21 (e.g. custodian agency
 responsibility), new leadership in the IEA, new legitimation strategies (modernization
 processes) etc. My chosen research design does not allow me to conclude on any of
 these possible explanations.
- The IEA was the first global actor to call on sustainable economic recovery after covid-19 hit the global economy. The fact that Birol himself stress this fact on the first ever Clean Energy Transition Summit, in front of 500 000 participants, demonstrates a shift in strategy that is more than just symbolic.
- There are few country-related differences in terms of dissemination of sources of legitimacy in the selected newspapers. IEA expertise accounts for the great share of well beyond 90% of the news articles, while IEA's contribution to collective gains and problem-solving is conveyed in between 35% and 45% of the news article.
- The IEA as we know it today has been shaped and colored by different executive directors.

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³⁰ Oil export from Iran, Iraq and Kuwait is of great importance as the countries have the fourth, fifth and sixth largest oil reserves in the world, respectively.

7 Discussion

In this chapter I will discuss how the results from the two empirical chapters 5 and 6 answer the research questions. Furthermore, the discussion will help to place the empirical findings in the context of theory and analytical framework. The chapter begins with a summary of the key findings, followed by a discussion of the main findings organized around the two research questions. Furthermore, I will explain what the results mean and why my findings are important in order to better understand how epistemic IOs exercise authority at the global level. As always, there are limitations associated with any research project. In that aspect, I will highlight a few examples of what my empirical findings *cannot* tell us, based on the limitations of my chosen research design.

Key Findings

In accordance with the global governance theory, my finding suggest that the IEA indeed strive to build legitimation narratives to justify its exercise of authority in the global governance system. This is done by using various sources of legitimacy as part of its legitimation narrative, as well as by using media as a strategy to support the legitimation process. What is less certain is whether more authority necessarily leads to more contestation in the case of epistemic IO authorities. Previous research shows that this is the case for political IO authorities, but my findings from the media content analysis did not demonstrate a correlation between a higher level of authority and contestation.

Interpretation of the Results

The specific research questions for this master's thesis were as follows:

- 1. In what ways does the IEA legitimize its exercise of authority in the global energy governance system?
- 2. To what extent is there coherence between the legitimation narrative the IEA has constructed and that which is actually communicated via media?

Research Question 1:

In recent years, more authority has been formally transferred to the IEA at the global level, one example being the new custodian agency responsibility for tracking the progress on SDG7. This conferral of authority to the IEA has resulted in a higher demand for legitimacy, and for the IEA to actively engage in legitimation processes which corresponds to theoretical expectations from the global governance theory. The results of the in-depth analysis in Chapter 5 indicates that IEA's legitimation processes often come in the form of modernization processes that have been introduced in new leadership periods. Institutionalized legitimacy deficiencies such as limited possibility for membership, uneven distribution of votes, earmarked funding, and lack of democratic processes in general forces the IEA to point at non-democratic sources of legitimacy when nurturing the belief that its authority is appropriately exercised. These *other* sources of legitimacy are mainly part of the technocratic narrative, where expertise, efficiency, problem-solving, and collective gains constitute four central pillars (ref. section 3.1.1).

Chapters 2 and 3 taught us that reflexive authorities in the global governance system depend on an epistemic foundation and emphasize the role of knowledge orders to defend their exercise of authority (Zürn, 2018, p. 45). This thesis has demonstrated that science and expertise have indeed grown in importance in recent years within global energy policy and is a crucial source of legitimacy for an epistemic IO authority such as the IEA. *Expertise* is safeguarded by being able to offer constantly new knowledge production, developed by the agency's own experts. The experts are mainly recruited from member countries, but recently, associated countries have also been invited into the dialogue which is a way of emphasizing the organization's global commitments and global concerns. Expertise is disseminated through articles, reports, press releases, websites, social media, classical media, and through conferences and other forms of global dialogue. This dissemination of IEA expertise has exploded in recent years, well supported by Fatih Birol's own engagement in social media as part of the legitimation strategy.

Efficiency is another crucial source of legitimacy for an epistemic IO authority that cannot rely on democratic processes and participation as part of its legitimation narrative. The agency compensates for democratic legitimacy deficits by offering efficiency as a unique quality to the decision-making processes. Efficiency is basically taken care of through the institutional design and has several benefits for the constituencies. At the transnational

level, the IEA, as a multilateral organization, ensures reduced costs of transactions and provides regular updates on relevant information to all member countries in a far more effective way than if each country were to obtain this knowledge on their own. At the organizational level, the IEA's loose affiliation with the parent organization (OECD) is important for the organization's ability to ensure internal efficiency in decision-making. As an autonomous organization within the framework of the OECD, the IEA has the opportunity to distance itself from OECD's rigid voting rules which enables the IEA to react quickly in situations that need quick decisions (for example release of strategic oil stocks in 2011).

As an organization gains more authority, new mandates often follow. This can be a mandate to interpret expertise, or a mandate to make decisions based on expertise. This is what Zürn refers to as an epistemic authority becoming "politicized" (Zürn, 2018, pp. 52,137). During the last ten years, there are examples of the IEA becoming politicized. In 2017 the organization was appointed custodian agency responsible for tracking the progress of the SDF7. This included a new mandate of «Tracking Clean Energy Progress». The many reports published in this project provide both expertise and interpretations in the form of recommendations on how each country can get 'on track' with the Sustainable Development Scenario (SDS) from the WEO (IEA/Tracking Clean Energy Progress, 2021). This leads us to problem-solving as another source of legitimacy for an IO authority. Problem-solving in the form of government advice, industry advice, and global recommendations has indeed become a central part of the IEA's activity. Although the IEA was established as an epistemic authority, the organizations advices and interpretations have on several occasions had political and behavioral implications. This becomes particularly prominent in crisis situations and in connection with tracking the achievement of the SDG7 targets as we saw above. To use Zürn's terminology once more, these findings indicate that the IEA has become politicized over the years even if the organization itself have no desire of becoming a political organization.

Collective gains is possibly the source of legitimacy within the technocratic narrative that has created the most challenges for the IEA. For whose needs should really be met now that the IEA is in the process of establishing itself as a global organization worth observing? The needs of the IEA members, or the needs of the global society? And what if the collective global gains come at the expense of member states' economic interests? As we remember from the theory chapter (section 3.1.1), one of the normative principles that underpins the

global governance theory is an assumption that there is a global common good, ascribed to communities beyond the nation states (Zürn, 2018, p. 27). Many of the IEA's legitimacy latest legitimation strategies seem to be taking place precisely in this global landscape with universal interests in mind. The IEA has made a conscious choice to distance itself from its old reputation as a representative of the rich oil-consuming West, to become a representative on global issues and global concerns. Such institutional shifts in focus do not always come without a cost. By becoming a "global" organization, the IEA finds itself in a vulnerable situation in the middle of competing coalitions and, thus, challenges geopolitics that for so many years has hindered global energy cooperation. This can, in a worst-case scenario, lead to the sort of *counter-institutionalization* that Zürn refers to in the global governance theory (Zürn, 2018, pp. 96-98, 170) where member states create a new organization to defend their interests when the other fails to do so. However, there is little indication that this is about to happen. In recent years, several of the member countries have on their own initiative introduced national energy policies that are not necessarily the best solution for the country financially.

All in all, the in-depth analysis shows that the IEA over the past years has made several strategic moves in response to contestation, or the *possibility* of contestation. The agency has strategically positioned itself at the center of the global energy dialogue which was a bold choice that could easily have failed if not momentum had been in place. An example of this was the 9 July 2020 conference on clean energy transition where 40 ministers from all over the world were discussing energy policies with Birol himself in front of 500 000 online participants. The IEA has also incorporated strategic Association Countries to include major developing countries that will play an increasingly important role within global energy governance in the years to come. In addition, I have noticed that the IEA often publishes comprehensive reports on specific topics just before a major summit or conference where the plan is to shed light on a particular topic. In this way, the IEA can also act as an *agenda setter* and influence the global energy discourse.

So far, I have used the in-depth analysis to show how the IEA has constructed a legitimation narrative that is largely built around the four technocratic sources of legitimation: expertise, efficiency, problem-solving, and collective gains. Tallberg and Zürns analytical framework suggests that these sources, each in their own way, contribute to shaping legitimacy beliefs

of audiences, thus legitimizing the IEA's exercise of authority in the global governance system (research question 1). Next, I will discuss to what extent there is coherence between the legitimation narrative the IEA has constructed and that which is actually communicated via media? (research question 2).

Research Question 2:

Dissemination through media has created enormous opportunities for international organizations to expose themselves to the global society, including epistemic IO authorities such as the IEA. In this respect, the media has an essential role in conveying the message that the IEA wants to reach out to its audiences with. The media can choose to support the chosen narrative the organization wish to convey, or they can pick out parts of the narrative that fit into the national context and the interests of its readers. Sometimes the media also choose to delegitimize an organization by accusing it of not having succeeded in its legitimation strategy by pointing to, for example, lack of democratic standards, or failed technocratic standards. Thus, it can be very beneficial to have a good relationship with the media.

In the media content analysis, I selected six major quality newspapers in three of the member countries (constituencies) and examined how the IEA, and other actors, used media as part of legitimizing/delegitimizing the organization. During the analysis it quickly became clear that delegitimation statements (negative tone) where the IEA was criticized for either being too fossil fuels friendly, for undermining renewable energy sources, or for being a club for rich western oil consuming countries were almost non-existent in the data material. This came as a surprise as I had a theoretical assumption that contestation comes with increased authority. There were even fewer supportive legitimation statements (positive tone). These findings indicate that quality newspapers in member countries are primarily neutral in the way they relate to the IEA as a source of information. On the other hand, this neutral relationship between the IEA and the media may still be beneficial for the IEA. Data from the media content analysis suggest that IEA is using the media as a strategy to spread its knowledge, its ideas, and its interpretations on national and global energy issues. Thus, a kind of symbiotic relationship has been established between the IEA and the media.

The media content analysis gave me insight into the type of global energy discourse that the IEA has been involved in over the past decade. During this period, the IEA has gone

through three leadership periods, and the global community has faced several crises that have affected the energy sector. What is ubiquitous is that the news articles refer to the IEA as a provider of new knowledge and expertise which is not surprising since the IEA is an epistemic authority where science and knowledge of the facts weigh heavily. But findings from the media content analysis also reveal other similarities between constructed narrative and that which is communicated via the media. On several occasions, the data showed that the IEA stepped out of its "knowledge-producing" role and into a far more politically inflamed landscape where the distance is short between advice and decision-making. Although the custodian agency mandate received little attention in the media, the IEA mandate to release strategic oil stocks on the other hand, received lots of attention. This means that problem-solving as a source of legitimacy was well accounted for in the media content analysis as well.

The Arab turmoil's in 2011, and the IEA's decision to release strategic oil stocks is the clearest example of IEA stepping into politics in the last decade. In order to curb contestation in connection with this controversial decision, the IEA had to make its subordinates believe in the benefit of the action and to trust its judgments. But it was not only the member states (constituencies) that had to be convinced. The agency also had to convince its observers, including the media. My data reveals that the OPEC countries responded quickly and called this action an unfortunate market intervention and accused the IEA of using the release as a political tool. The member countries, for their part, seem to have trusted the judgment of the IEA and there was minimal media coverage of negative tone in the newspapers. The year 2020 is another example where the IEA almost crossed the line between the epistemic and the political when they encouraged various governments to implement new energy policies in the recovery process that awaits after the covid-19 pandemics. In the data material, this is demonstrated in the form of a high proportion of «problem-solving» also in 2011 (Figure 7). The media went to great lengths to cover both these crises and their impact on the energy sector, and thereby helped strengthening the IEA's credibility as a knowledge producer and problem solver.

When it comes to efforts of legitimizing its action based on an underlying social purpose, or collective gain, we saw that the way one chooses to interpret "collective gain" has a lot to say for the outcome of this variable. I chose to include "global economic recovery" after a crisis as a global collective gain although this is likely to come at the

expense of other collective gains such as taking urgent action to combat climate change (SDG13). The results from this variable must therefore be understood with this and other considerations in mind. For an individual who considers "global economic recovery" to be a legitimate collective gain, the IEA is likely understood as an actor that is concerned with achieving collective gains also during a global crisis. When that being said, I notice that the IEA has a genuine desire to prevent global warming and to use the recovery after the covid-19 pandemic as an opportunity to implement energy policies that favor clean energy transition. I therefore argue that the IEA's desire to appear as an organization in pursue of a social underlying global purpose is also largely taken care of through media coverage during the last ten years, even though there were relatively large individual differences in the selected newspapers.

Efficiency was not included as a variable in the media content analysis. This was a decision I made after the initial pilot test. Efficiency proved to be based almost exclusively on latent content and was virtually impossible to capture in a credible way. Examples, such as the release of strategic stocks in 2011, could of course be interpreted as efficiency demonstrated in practice. The same can be said about all the references to the IEA as an autonomous organization in the framework of the OECD. But my guess is that most people do not know what this means in a figurative sense, and what relevance it has for policy making. Thus, it will not provide legitimacy beliefs about the organization's efficiency to most readers. Based on many cases of doubt, and great degree of subjective interpretation, I chose not to include this variable in the analysis.

So far, I have established that there seems to be coherence between the legitimation narrative the IEA has constructed and that which in actually communicated in the selected media on a general level, but I want to expand the discussion a bit and highlight some of the aforementioned country-related differences. The findings from the analysis show that media take great liberty in choosing what IEA related expertise and what IEA related problemsolving they wish to disseminate. Although the well-known flagship report WEO contains information on all energy sources, it became clear that some newspapers such as The Times seemed to consistently refrain from disseminate knowledge related to renewable energy sources when they published news articles covering the latest edition of the WEO. This was particularly prominent during the first five years of the analysis. The data also suggest that it was the French newspapers that mainly conveyed IEA's positive attitude towards nuclear as

part of the solution to solve the climate crisis. The American newspapers, on the other hand, seemed to absorb and convey everything that had to do with shale oil and shale gas and the fact that these new energy sources are cleaner than coal. The greatest "domestic" differences were probably between the British newspapers The Guardian and The Times. While The Times seemed to be loyal to the oil industry and publish most information that had to do with the IEA's oil market updates, The Guardian appeared more nuanced and conveyed a wider range of the IEA's expertise.

This last part of the discussion shows that although the analyses indicate coherence between constructed narrative (ref. in-depth analysis) and communicated narrative (ref. media content analysis) (Figure 7 and Figure 14), it is a simplification of reality. To be able to fully answer the research question one should also take into account individual differences between the selected media sources. The Times is probably not reflecting the new legitimacy narrative that the IEA has constructed as well as its national competitor The Guardian as already discussed. A different choice of sources (newspapers with a stronger political alignment to either side, journals, or reports from different NGOs) or countries (non-IEA members for example) would likely also give different results. My initial plan was to include Germany in the analysis. I retrieved data from Factiva on Süddeutche Zeitung and Frankfürter Allgemeine Zeitung, but none of these newspapers had had an agreement with Factiva for the entire ten-year period. I therefore decided to leave them out for this time.

Should there be periods of failed coherence between IEA's constructed narrative and what the media chooses to disseminate, the IEA can resort to other types of media as part of its legitimation process. In fact, IEA is an active user of social media and broadcasts information daily via several social media channels, often fronted by executive director Fatih Birol himself. The fact that Fatih Birol poses as the organizations public face in both quality press and social media provides consistency and clarity and ensures that the organization has some level of control on what is being communicated to the audiences regarding its legitimacy.

Implications of the Results

The study provides new insight into the important authority legitimacy link which is at the core of the global governance theory. Findings from the in-depth analysis support Zürn's theoretical argument claiming that reflexive authorities (political and epistemic) constantly

engage in legitimation processes to nurture the belief that its authority is appropriately exercised. Without sufficient legitimacy among its audiences it would be hard for the IEA to convince the subordinate about the credibility of its interpretations or the benefit of its actions. Zürn claims that international authorities in the global governance system are both able and expected to exercise authority to defend their position as global actors worth observing (Zürn, 2018, p. 35). Throughout this decade, we have seen how the IEA has adapted to the new societal context through modernization process and institutional adjustments. We have also seen how the organization has set itself the goal of becoming an "authoritative voice on global energy policy", and to a great extent has succeeded in this effort. The number of citations in media is enough to substantiate this argument, but increased participation and leadership in the global dialogue in general supports the claim.

My findings give insight into the legitimation process of an epistemic IO authority which is something that has received little attention in previous research. Epistemic and political authorities are two different branches of reflexive authorities, but political authorities have so far been overrepresented in legitimation studies of reflexive authorities. Based on the results from my analysis, and the possibility of theoretical generalization discussed in section 4.2, I argue that epistemic authorities do not necessarily face as much contestation as political IO authorities. The sort of contestation we say in the Guardian in 2009 is not representative for quality press newspapers in member countries and has become quite rare in recent years. Why should the IEA then bother to engage so heavily in legitimation processes? I can think of a few possible explanations for this. One scenario is that the IEA has largely succeeded in creating legitimacy beliefs that its authority is appropriately exercised (therefore no contestation in the media). Another possible explanation is that media do not see the need to examine the credibility of the IEA's knowledge production. The latter explanation is unfortunate, as all organizations are at risk of being "captured" in the sense of becoming dominated by the interests they are intended to regulate and not by the public interest (ref. George Stigler's "capture theory from 1970)³¹. An energy actor such as the IEA can, for example, be captured by certain industry groups, lobby groups, or member countries that fund certain projects at the expense of, for example, renewable projects. A completely uncritical press that do not reflect on the

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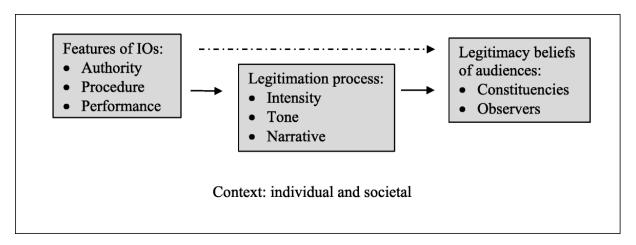
³¹ https://www.investopedia.com/terms/r/regulatory-capture.asp

credibility of the facts is therefore not desirable. A third explanation might be that the technocratic narrative becomes the *necessary* narrative in times of crisis when the problems becomes so complex, and our own limitations becomes so visible, that we realize we need the experts.

To sum up the discussion of the research questions in this chapter, I have assembled key elements from the theory and empiricism in a matrix that shows a simplified version of the IEA's legitimation narrative. As we see, the democratic and purposive dimension from Figure 1 is replaced by the technocratic narrative, as all the identified sources of legitimacy belong to this narrative. Theory had a prominent role in this project, and here we can see quite specifically how theoretical elements are realized through empirical findings.

Technocratic narrative		
Procedure (the quality	Expertise	Efficiency
of decision-making)	Secured through knowledge	Secured through institutional
	production leading to	set-up as an autonomous
	decision-making based on	organization, and through I.E.P
	sentiment of trust in science.	Agreement which safeguards
		this efficiency in decision-
		making.
Performance (the	Problem-solving	Collective gains
quality of decision)	Secured through increased	Secured by emphasizing the
	authority and new global	global value of the underlying
	mandates as custodian	social purpose.
	agency for tracking the	
	progress on SDG7.	

Table 4. The Technocratic Matrix based on Table 1 and related empirical findings from the analyses.



Revisiting Figure 1 from section 3.3

The analytical framework that this study is based upon distinguishes between authority, legitimation and legitimacy and can in principle be used to say something about what factors that shape both legitimation processes and legitimacy beliefs of IOs. The top dashed line in the model shows that legitimacy beliefs might be a direct product of objective institutional features of IOs. This way of evaluating legitimacy is based on full information about, and rational evaluation of, institutional features, that the audience care about (Tallberg & Zürn, 2019). My chosen research design, starting with an in-depth analysis of the IEA, allows me as an *individual* to make a judgement of whether I hold the IEA to me more or less legitimate, but the design cannot inform research about legitimacy beliefs among citizens in IEA member countries in general. For that I would have to do additional interviews or surveys. In this case study of an epistemic IO authority I have concentrated on mapping legitimation processes (strategies) employed by the IEA during the last ten years with the intention to shape legitimacy beliefs. That makes the *legitimation processes*, and not legitimacy beliefs, the phenomenon of interest.

The Emergence of a New Energy Regime?

Eight years after Keohane and Victor questioned the possibility of a global energy regime (section 3.2.2), I argue that this is exactly what we have got during this last decade. I believe this happened at the very moment the Sustainable Development Goals were signed. With a unique goal on energy (SDG7), and related targets and indicators for how to reach

the goal by 2030, we have indeed created rules for effective cooperation which form the foundation of a regime (Keohane, 1984). We have also identified key actors in the new energy regime. Some of these were mentioned in section 5.8 (Relations with Key Actors). A group of carefully selected actors have also been appointed custodian agencies and are responsible for tracking the progress on how the world is doing in our joint global efforts to ensure access to affordable, reliable, sustainable, and modern energy for all. Although there are no dispute settlement mechanisms to handle conflicts among states, Agenda 2030 has built-in compliance mechanisms where each country is responsible for fulfilling its own promises. If a country does not deliver what it promises, it will have to deal with "naming and shaming", well supported by the media.

Important questions that arise when entering a new energy regime is whether the idea of legitimation is different if the regime is led by a group of epistemic IO authorities. In the absence of a global *world energy organization*, several researchers have pointed to the IEA as the first in line to take on such a global leadership. What significance would it have for the global society if an epistemic IO authority was to end up at the very top of the new energy regime? Today, the IEA is not subject to democratic control and does not have to defend its use of non-democratic practices as part of its legitimation narrative. Public expectations to legitimacy might on the other hand change in the future if the IEA was to become a "Politically Assigned Epistemic Authority" (PAEA) with mandate to make decisions on energy issues that concerns all of us.

8 Conclusion

This study was aimed at exploring how an epistemic IO authority such as the IEA legitimizes its exercise of authority in the global governance system despite institutionalized legitimacy deficits. The results show that the IEA first and foremost legitimizes itself by using technocratic sources of legitimacy such as expertise, efficiency, problem-solving, and collective gains. This is largely the same legitimation narrative as the one being communicated through media in six selected quality newspapers in three IEA member countries. Although the different newspapers place different emphasis on the sources of legitimacy, we still observe an overall coherence between the legitimacy narrative the IEA has constructed and that which is communicated through quality press media. This may indicate that the IEA has succeeded in its legitimation strategy, which in turn may be an explanation for why the organization has not been subjected to significant contestation over the past ten years.

In a future study it would be interesting to use the full potential of the analytical framework (Figure 1) and explain legitimacy beliefs of specific audiences in addition to legitimation processes that are intended to shape such beliefs. An appropriate research question could then have been: "How does the IEAs conformance to legitimation standards influence the audience's perceptions of the organization?" This would inform research not only about the legitimation process employed by an epistemic IO authority, but also the effect of such legitimation efforts. When measuring a complex phenomenon such as legitimacy beliefs, one must take into account that the things people say publicly (for example through quality press newspapers) is not necessarily their true belief. This means that I would have to retrieve data from other sources than newspapers if I was to measure honest legitimacy beliefs. Here I find interviews or surveys most suitable for the task. However, it would be a challenge to gather a representative selection of interview objects. If it was not possible or desirable to conduct interviews (such as during this pandemic), another possibility could be to collect data from individual's social media platforms such as Twitter, Facebook, or LinkedIn. This would require training in social media research.

Another recommendation for further research would be to carry out the exact same study by retrieving data from Norwegian newspapers, as Norway is the only IEA member country with its own unique membership agreement. In Norway, there are a lot of

stakeholders that are directly affected by the things IEA says about the future of the oil- and gas industry. As an oil- and gas-producing country, Norway has so far been much less vulnerable to high oil prices and shortage in oil supply. When the IEA chose to release strategic oil stocks from the member countries reservoirs in 2011, it was therefore not necessarily a positive move for Norway, economically speaking. On 18 May 2021, the Norwegian newspaper *E24* published an article with the title: "Does the IEA change the premises for the Norwegian oil debate: - Should be a real wake-up call". According to a recent IEA report, "A Roadmap for the Global Energy Sector"³², no new oil and gas fields will be needed after 2021 if the world is to reach net zero emissions by 2050. Greenpeace applaud the report and said it should be a "game changer" in Norwegian oil and gas policy. This is no good news for the Norwegian oil and gas industry, which has a mandate from the Norwegian government to continue looking for new oil fields in the North Sea. This IEA report will be an important input in the global dialogue leading up to the COP26 climate summit in Glasgow in November 2021.

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³² A Roadmap for the Global Energy Sector: https://iea.blob.core.windows.net/assets/20959e2e-7ab8-4f2a-b1c6-4e63387f03a1/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf

9 Bibliography

- Adcock, R., & Collier, D. (2001). Measurement Validity: A Shared Standard for Qualitative and Quantitative Research. *Am Polit Sci Rev*, *95*(3), 529-546. https://doi.org/10.1017/S0003055401003100
- Agreement on an International Energy Program, (2018).

 https://iea.blob.core.windows.net/assets/c6be6d60-1ca8-4b99-b8c7-7ac508ec157c/IEP.pdf
- Babbie, E. R. (2013). The Practice of Social Research (13th Ed. ed.). Belmont, Calif.
- Bamberger, C. S. (2004). The history of the International Energy Agency, 1974-2004. : IEA, the first 30 years : Volume 4, : Supplement to volumes I, II, & III (Vol. Volume 4). OECD/IEA.
- Bhattacherjee, A. (2012). *Social Science Research: Principles, Methods, and Practices* Global Text Project. http://scholarcommons.usf.edu/oa textbooks/3
- Binder, M., & Heupel, M. (2015). The Legitimacy of the UN Security Council: Evidence from Recent General Assembly Debates. *International studies quarterly, 59*(2), 238-250. https://doi.org/10.1111/isqu.12134
- Bradford, A. (2007). Regime Theory. https://scholarship.law.columbia.edu/faculty_scholarship/1970
- Buchanan, A., & Keohane, R. O. (2006). The Legitimacy of Global Governance Institutions. *Ethics int. aff, 20*(4), 405-437. https://doi.org/10.1111/j.1747-7093.2006.00043.x
- Budak, C., Goel, S., & Rao, J. M. (2016). Fair and Balanced? Quantifying Media Bias through Crowdsourced Content Analysis. *Public Opinion Quarterly, 80*(S1), 250-271. https://doi.org/10.1093/poq/nfw007
- Bukve, O. (2016). Forstå, forklare, forandre : om design av samfunnsvitskaplege forskingsprosjekt. Universitetsforl.
- Caldeira, G. A., & Gibson, J. L. (1992). The Etiology of Public Support for the Supreme Court. *American journal of political science, 36*(3), 635-664. https://doi.org/10.2307/2111585
- Carmines, E. G., & Zeller, R. A. (1979). Reliability and validity assessment (Vol. 17). Sage.

- Charmaz, K. (2003, 01/01). Qualitative interviewing and grounded theory analysis. *En J. F. Gubrium & J. S. Holstein (Eds.), Handbook of interview research: context and method*, 675-694. https://doi.org/10.4135/9781452218403.n25
- Coronavirus: Trump accuses WHO of being a 'puppet of China'. (2020, 19 May 2020). *BBC News*. https://www.bbc.com/news/health-52679329
- Dellmuth, L. M., Scholte, J. A., & Tallberg, J. (2019). Institutional sources of legitimacy for international organisations: Beyond procedure versus performance. *Review of International Studies*, 45(04), 627-646. https://doi.org/10.1017/s026021051900007x
- Denscombe, M. (2002). *Ground rules for good research : a 10 point guide for social researchers*. Open University Press.
- Eisentraut, S. Democratic Governance Beyond the Nation-State: Democratic conceptions from six world regions. *Politische Vierteljahresschrift*.
- Felix, B., & Lewis, B. (2016, MAY 11, 2016). OECD and IEA ponder divorce after years of friction: document. https://www.reuters.com/article/us-iea-oecd-split-idUSKCN0Y2001
- Florini, A. (2011). The International Energy Agency in Global Energy Governance. *Global policy*, 2(s1), 40-50. https://doi.org/10.1111/j.1758-5899.2011.00120.x
- From oil security to steering the world toward secure and sustainable energy transitions. (18 Feb 2021).
- Furlong, P., & Marsh, D. (2010, 01/01). A Skin Not a Sweater: Ontology and Epistemology in Political Science. *Theory and Methods in Political Science*. https://doi.org/10.1007/978-0-230-36664-0 10
- G8 call for increased investment. (2009, 9 July 2009). https://www.iea.org/news/iea-says-that-g8-call-for-increased-investment-in-energy-supply-energy-efficiency-and-low-carbon-technology-is-timely-and-urgent
- Gentzkow, M., & Shapiro, J. M. (2010). What Drives Media Slant? Evidence From U.S. Daily Newspapers. *Econometrica*, 78(1), 35-71. https://doi.org/10.3982/ECTA7195
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory : strategies for qualitative research.* Aldine de Gruyter.
- Goldthau, A., & Witte, J. M. (2009). Back to the future or forward to the past? Strengthening markets and rules for effective global energy governance. *International affairs* (*London*), 85(2), 373-390. https://doi.org/10.1111/j.1468-2346.2009.00798.x
- Hallin, D. C., & Mancini, P. (2004). *Comparing media systems : three models of media and politics*. Cambridge University Press.

Helleiner, E. (2019). The life and times of embedded liberalism: legacies and innovations since Bretton Woods. *Review of International Political Economy, 26*(6), 1112-1135. https://doi.org/10.1080/09692290.2019.1607767

Heywood, A. (2015).

Political theory: An introduction (4th ed. ed.). Palgrave Macmillan.

- Hooghe, L., & Marks, G. (2005). Calculation, Community and Cues: Public Opinion on European Integration. *European Union politics*, *6*(4), 419-443. https://doi.org/10.1177/1465116505057816
- Hurrelmann, A., & Schneider, S. (2015). *The Legitimacy of Regional Integration in Europe and the Americas* (A. Hurrelmann & S. Schneider, Eds.). Palgrave Macmillan.
- IEA, IRENA, UNSD, WB, & WHO. (2019). *Tracking SDG 7: The Energy Progress Report 2019*. https://sustainabledevelopment.un.org/content/documents/2019 Tracking SDG7 R eport.pdf

IEA/Analysis. (2021). https://www.iea.org/analysis/all

IEA/Areas of Work. (2021). https://www.iea.org/areas-of-work

IEA/Covid-19 impact. (2021). https://www.iea.org/topics/tracking-clean-energy-progress#covid-19-impact

IEA/Defining energy access: 2020 methodology. (2020, 13 October 2020). https://www.iea.org/articles/defining-energy-access-2020-methodology

IEA/History. (2021, 18 Feb 2021). https://www.iea.org/about/history

IEA/Leadership. (2021). https://www.iea.org/about/leadership

IEA/Membership. (2021, 26 January 2021). https://www.iea.org/about/membership

IEA/Structure. (2021, 4 May 2021). https://www.iea.org/about/structure

- *IEA/Tracking Clean Energy Progress.* (2021). https://www.iea.org/topics/tracking-clean-energy-progress
- IEA: Shared Goals, (1993). https://iea.blob.core.windows.net/assets/b01dc266-6b76-4cb6-846b-b236cb50af93/IEASharedGoals-1993.pdf
- Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change, and democracy: the human development sequence*. Cambridge University Press. https://www-proquest-com.pva.uib.no/books/modernization-cultural-change-democracy-human/docview/36784468/se-2?accountid=8579

- IRENA. International Renewable Energy Agency. (2020, 30 Jan 2020). https://www.iea.org/areas-of-work/international-collaborations/irena
- Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47(2), 263-291. https://doi.org/10.2307/1914185
- Karlsson-Vinkhuyzen, S. I. (2015). The Legitimation of Global Energy Governance: A normative exploration. In F. Mancebo & I. Sachs (Eds.), *Transitions to Sustainability* (pp. 123). Springer Netherlands: Imprint: Springer.
- Katzenstein, P. J. (1985). *Small States in World Markets: Industrial Policy in Europe*. Cornell University Press.
- Keohane, R. O. (1978). The international energy agency: state influence and transgovernmental politics. *Int Org, 32*(4), 929-951. https://doi.org/10.1017/S0020818300032033
- Keohane, R. O. (1984). *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton: Princeton University Press.
- Keohane, R. O. (1990). Multilateralism: An Agenda for Research. *International journal* (*Toronto*), 45(4), 731. https://doi.org/10.2307/40202705
- Keohane, R. O., & Victor, D. G. (2013). The Transnational Politics of Energy. *Daedalus* (*Cambridge, Mass.*), 142(1), 97-109. https://doi.org/10.1162/DAED a 00196
- King, G., Keohane, R. O., & Verba, S. (1994). *Designing social inquiry : scientific inference in qualitative research*. Princeton University Press.
- Krasner, S. D. (1983). International Regimes. Cornell University Press.
- Lichter, P. (2017). After 50 years: Future challenges in publishing cancer research. *Int J Cancer*, 140(1), 9-9. https://doi.org/10.1002/ijc.30469
- Macalister, T. (2009, 9 November 2009). Key oil figures were distorted by US pressure, says whistleblower. *The Guardian*.

 https://www.theguardian.com/environment/2009/nov/09/peak-oil-international-energy-agency
- Maria van der Hoeven begins term as IEA Executive Director. (2011, 1 September 2011). https://www.iea.org/news/maria-van-der-hoeven-begins-term-as-iea-executive-director
- Mignone, A. (2005, 2005//). International Co-Operation on Energy Technologies Research and Development. Renewable Energies for Central Asia Countries: Economic, Environmental and Social Impacts, Dordrecht.

- Morse, J. C., & Keohane, R. O. (2014). Contested multilateralism. *Review of International Organizations*, *9*(4), 385-412. https://doi.org/10.1007/s11558-014-9188-2
- Neuendorf, K. A. (2017). *The content analysis guidebook* (2nd edition. ed.). SAGE Publications, Inc.
- Nobuo Tanaka nominated to succeed Claude Mandil as IEA Executive Director in September 2007. (2006, 14 December 2006). https://www.iea.org/news/nobuo-tanaka-nominated-to-succeed-claude-mandil-as-iea-executive-director-in-september-2007
- [Record #96 is using a reference type undefined in this output style.]
- Nuclear Power in France. (2021, Janury 2021). World Nuclear Association.

 https://www.world-nuclear.org/information-library/country-profiles/countries-a-f/france.aspx
- Nuclear share figures, 2009-2019. (2020, September 2020). World Nuclear Association. https://www.world-nuclear.org/information-library/facts-and-figures/nuclear-generation-by-country.aspx#.UkrawYakrOM
- PRIS Power Reactor Information System. (2021). IAEA. https://pris.iaea.org/PRIS/CountryStatistics/CountryStatisticsLandingPage.aspx
- Ruggie, J. G. (1983). International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order. In S. D. Krasner (Ed.), *International Regimes* (pp. 195-231). Cornwell University Press.
- Scharph, F. W. (1970). *Demokratietheorie zwischen Utopie und Anpassung*. Universitätsverlag.
- Schmidtke, H. (2018). Elite legitimation and delegitimation of international organizations in the media: Patterns and explanations. *The Review of International Organizations*, 14(4), 633-659. https://doi.org/10.1007/s11558-018-9320-9
- Scholte, J. A. (2011). *Building Global Democracy?: Civil Society and Accountable Global Governance*. Cambridge University Press. https://doi.org/DOI: 10.1017/CBO9780511921476
- Scholte, J. A. (2018). Social Structure and Global Governance Legitimacy. In B. Tallberg, and Scholte (Ed.), *Legitimacy in Global Governance: Sources, Processes, and Consequences*. Oxford University Press.
- Scholte, J. A., & Tallberg, J. (2018). Theorizing the Institutional Sources of Global Governance Legitimacy. In B. Tallberg, and Scholte (Ed.), *Legitimacy in Global Governance:*Sources, Processes, and Consequences. Oxford University Press.

- Scott, R. (2004a). The History of the International Energy Agency The First 20 Years: Origins and Structure Volume 1. OECD Publishing.
- Scott, R. (2004b). *The History of the International Energy Agency : Major Policies and Actions Volume 2*. OECD Publishing.
- SE4ALL Global Tracking Framework.

https://www.worldbank.org/en/topic/energy/publication/Global-Tracking-Framework-Report

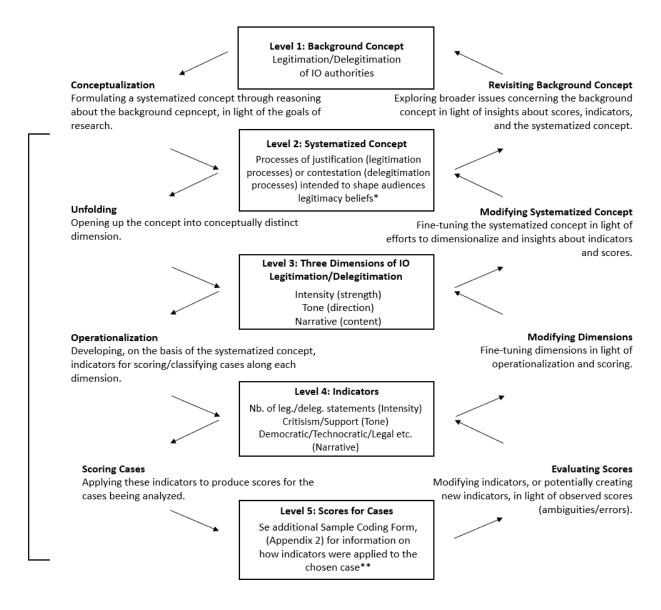
- SEforALL: Who we are. https://www.seforall.org/who-we-are
- Swanborn, P. (2010). *Case Study Research: What, Why and How?* London: SAGE Publications Ltd.
- Tallberg, J., & Zürn, M. (2019). The legitimacy and legitimation of international organizations: introduction and framework. *The Review of International Organizations*, *14*(4), 581-606. https://doi.org/10.1007/s11558-018-9330-7
- Tyler, T. R. (1990). Why People Obey the Law. Yale University Press.
- Un Nouveau 'Discours de Harvard'. (1973, 14 December 1973). Le Monde.
- Van de Graaf, T. (2012). Obsolete or resurgent? The International Energy Agency in a changing global landscape. *Energy Policy, 48,* 233-241. https://doi.org/10.1016/j.enpol.2012.05.012
- Van de Graaf, T. (2013). Fragmentation in Global Energy Governance: Explaining the Creation of IRENA. *Global Environmental Politics*, *13*(3), 14-33. https://doi.org/10.1162/GLEP a 00181
- Van de Graaf, T., & Colgan, J. (2016). Global energy governance: a review and research agenda. *Palgrave Communications*, 2(1). https://doi.org/10.1057/palcomms.2015.47
- Van de Graaf, T., & Lesage, D. (2009). The International Energy Agency after 35 years: Reform needs and institutional adaptability. *The Review of International Organizations*, 4(3), 293-317. https://doi.org/10.1007/s11558-009-9063-8
- Van de Graaf, T., & Westphal, K. (2011). The G8 and G20 as Global Steering Committees for Energy: Opportunities and Constraints. *Global policy*, 2(s1), 19-30. https://doi.org/10.1111/j.1758-5899.2011.00121.x
- Voelsen, D., & Schettler, L. V. (2019). International political authority: on the meaning and scope of justified hierarchy in international relations. *International Relations*, *33*(4), 540-562. https://doi.org/10.1177/0047117819856396

- Weber, M., Roth, G., & Wittich, C. (1978). *Economy and society : an outline of interpretive sociology : 1* (Vol. 1). University of California Press.
- White, P. (2009). *Developing research questions : a guide for social scientists*. Palgrave Macmillan.
- Wilson, A. (2016). *International Energy Agency: Origins and developments*. E. E. P. R. Service. https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_IDA (2016)582015
- Yale, L., & Gilly, M. C. (1988). Trends in Advertising Research: A Look at the Content of Marketing-Oriented Journals from 1976 to 1985. *Journal of advertising*, 17(1), 12-22. https://doi.org/10.1080/00913367.1988.10673099
- Zapp, M. (2018). The scientization of the world polity: International organizations and the production of scientific knowledge, 1950–2015. *International Sociology, 33*(1), 3-26. https://doi.org/10.1177/0268580917742003
- Zürn, M. (2017). From constitutional rule to loosely coupled spheres of liquid authority: a reflexive approach. *Int. Theory, 9*(2), 261-285. https://doi.org/10.1017/S1752971916000270
- Zürn, M. (2018). *A Theory of Global Governance: Authority, Legitimacy, and Contestation*. Oxford University Press. https://doi.org/10.1093/oso/9780198819974.001.0001

10 Appendices

Appendix 1

Measuring Legitimation



^{*}Legitimacy is conceptualized as the belief that an IO's authority is appropriately exercised.

The layout in this model is adopted from the study *Measurement Validity: A Shared Standard for Qualitative and Quantitative Research* (Adcock & Collier, 2001).

^{**} Case: Legitimation strategies (processes) employed by an epistemic IO authority during a ten-year period.

Appendix 2

Sample Coding Form

ticle ID:D	Date:	
ewspaper:	Type of article:	
Variables*	N/A	Yes
1. Crisis		
2. Global Dialogue		
3. Expertise		
4. Problem-solving		
5. Collective Gains (global)		
6. Negative tone against the IEA		
7. Positive tone against the IEA		
8. Refers to IEA expert		
9. Refers to Executive Director		
10. Focus on Fossil Fuels		
11. Focus on Non-Carbon Fuels		
xplanations of variables on page back page		
ualitative free text:		

Explanation of variables:

- 1. A crisis in the energy sector is coded as a period of severe difficulties that affects many countries, sectors and actors at the same time. A crisis in the energy sector often has ripple effects and persists in the system for year. In my chosen 10-year period, the term is related to situations such as the Financial crisis, the Arab Revolutions, the Fukushima nuclear disaster, the Libya crisis, the Iran Nuclear Crisis, and the Covid-19 pandemic healthcare crisis.
- 2. Global dialogue is coded as various forms of international cooperation on energy issues such as conferences, summits, formal agreements, and climate negotiations.
- 3. Expertise is coded as expert knowledge (i.e. interviews with an IEA official) and knowledge production in the form of reports, analysis, outlooks or forecasts.
- 4. Problem-solving is here coded as situations where the IEA offers policy recommendations, government and industry advice, or decides to take action to solve a specific problem (the latter in the form of release of strategic stocks as an element of market regulation).
- 5. Collective gains are limited to common goods that benefit the world as a whole. Collective gains that only benefit IEA's member countries are therefore not coded as a collective gain in this analysis. Examples of global collective gains are "fighting climate change", or "global economic recovery" after a crisis.
- 6. Negative tone against the IEA is coded as situations where the author, or a person or group described in the media article criticize IEAs knowledge production or actions. Examples of negative words and phrases to describe the IEA could be "illegitimate organization", "a lobby business for rich oil consuming countries" and "the organization is deliberately downscaling the future of renewables".
- 7. Positive tone against the IEA is here coded as situations where the author, or a person or group described in the media article clearly acknowledges IEAs knowledge production or actions as legitimate.
- 8. Refers to IEA expert is a variable that is meant to capture every time an IEA expert is directly quoted or mentioned in the media coverage on behalf of the IEA.
- 9. Refers to Executive Director is a variable meant to isolate the times when the head of the IEA speaks or is mentioned in the media coverage on behalf of the IEA.
- 10. Focus on fossil fuels covers the traditional carbon energy sources which emits greenhouse gasses to the atmosphere, mainly oil, coal, and gas.
- 11. Focus on Non-carbon fuels first and foremost covers renewables, but also nuclear which is considered a clean source of energy by the IEA as long as safety measures prevents disasters such as the ones in Chernobyl and Fukushima.

More details are available in the code book, Appendix 3.

Appendix 3

Appendix for chapter 6 - Codebook

Background information about the newspapers in the sample

All newspapers in the sample are categorized as "quality press" newspapers. The term "quality press" came into use in the last few decades. It usually refers to some of the more serious newspapers around the world that report on world events and major news stories³³. The counterpart to quality press is tabloids. The term Quality press is usually used when referring to British newspapers and has replaced the old term "Broadsheet" which is rarely used today due to new "tabloid formats" of the old broadsheet newspapers. Although the term is most used inside the UK, there are American and European newspapers that are considered to be quality press newspapers. I have therefore chosen to use this term as a collective term to describe the type of newspapers that are included in the sample. Moreover, all quality press in the sample have daily circulation and is known for conveying political news.

From earlier media research we know that newspapers differ ideologically and is often placed on a left-right spectrum (Hallin and Mancini, 2004; Lichter, 2017, Schmidtke et. al, 2018, 643). They also often give preferential access to certain actors, and present news in a left-right biased manner (Schmidtke, 2018, 643). To avoid this bias, I have collected data from one center-left and one center-right quality newspaper from every country as far as this was possible. In the US, there are no centre-right quality newspapers that focus on political news (Budak et al. 2016; Gentzkow and Shapiro 2010). The only centre-right newspaper is the Wall Street Journal which has a strong focus on business and financial news (Schmidtke et al., 2018, 64x). This newspaper was therefore not included in the sample. Instead I chose The Washington Post which is a centrist newspaper, and the The New York Times (centre-left). For UK I chose The Guardian (centre-left) and The Times (centre-right). For France I chose Le Monde (centre-left) and Le Figaro (centre-right).

The Guardian is a British daily national newspaper that was founded in 1821 as The Manchester Guardian, before it changed name to The Guardian in 1959. Since 2018, the

³³ https://www.openpr.com/wiki/quality-press

paper's main newsprint sections have been published in tabloid format. As of June 2021, its print edition had a daily circulation (average per issue) of 108 639³⁴. The Guardian is part of the Guardian Media Group, owned by the Scott Trust. The Trust forms part of a unique ownership structure for the Guardian that ensure editorial interests remain free of commercial pressures ³⁵. The paper's readership is generally on the mainstream left of British political opinion https://web.archive.org/web/20090523104959/http://www.ipsosmori.com/content/polls-05/voting-intention-by-newspaper-readership-quarter-1.ashx.

The Times is a British daily national newspaper that was founded in 1785 under the name The Daily Universal Register, before it changed name to The Times in 1788. Since 2004, the paper has been published in tabloid format. The Times has lent its name to numerous other papers around the world, such as The New York Times. The Times had an average daily circulation of 417,298 ³⁶ in January 2019. The Times is owned by News UK (formerly News International, a wholly owned subsidiary of News Corp³⁷. The paper's readership is generally on the mainstream right of British political opinion ³⁸.

The New York Times is an American daily national newspaper that was founded in 1851. As of December 27, 2020, they had about 7,5 million paid subscriptions across 232 countries to both digital and print products, and average print circulation was app. 374.000 for weekday and 854.00 for Sundays³⁹. It is owned by The New York Times Company and is traded on the New York Stock Exchange. The paper's readership is generally on the lean left on the political spectrum⁴⁰

The Washington Post (WP) is an American daily newspaper. It is the most widely circulated newspaper published in Washington, D.C., and was founded in 1877, making it the area's oldest extant newspaper. Located in the capital city of the United States, the newspaper has a particular emphasis on national politics. Daily editions are printed for the

³⁴ https://www.abc.org.uk/product/2451

³⁵ https://www.theguardian.com/the-scott-trust/2015/jul/26/the-scott-trust

³⁶ For comparison, The Guardian has a daily distribution of 141,460 per February 2020 according to the same source: https://www.pressgazette.co.uk/national-newspaper-abcs-mail-titles-see-year-on-year-circulation-lift-as-bulk-sales-distortion-ends/

³⁷ https://www.pressgazette.co.uk/times-and-sunday-times-merger-ruled-out-directors-finally-approve-appointments-witherow-and-ivens/

 $[\]frac{38}{\text{https://web.archive.org/web/20090523104959/http://www.ipsos-mori.com/content/polls-05/voting-intention-by-newspaper-readership-quarter-1.ashx}$

³⁹ https://nytco-assets.nytimes.com/2021/03/Final-NYT-2020-Annual-Report.pdf

⁴⁰ https://www.allsides.com/news-source/new-york-times

District of Columbia, Maryland and Virginia⁴¹. It is owned Nash Holdings, a holding company established by Jeff Bezos, that bought it in 2013 from the Graham family for 250 Million Dollar⁴². The Washington Post is close to a centrist newspaper on the political spectrum⁴³. In 2020 it endorsed Joe Biden, the democratic presidential candidate, for the presidential election⁴⁴.

Le Monde is based in Paris and was founded in 1944 as a single page printed on both sides. It is noted to be France's let-to-centre paper⁴⁵ with a political positioning closer to The Guardian in the UK. It is also the newspaper that best reflects French opinion on international issues, and the French daily that is most read outside France⁴⁶. It is headquartered in Paris and is owned by private investors since 2010. It has an average circulation of 350.000⁴⁷.

Le Figaro was originally founded as a satire newspaper in 1826 and is France's oldest newspaper still in print. It has been printed every day since 1866 and is a conservative newspaper centre-right⁴⁸. It is headquartered in Paris and owned by Dassault Group. It has an average circulation of 318.000⁴⁹.

Codebook with explanations and comments

All my selected variables can be found in the entire text. I do not distinguish between title, preface or article text. An overall explanation of the codebook's further "logic" follows.

⁴¹ https://ropercenter.cornell.edu/washington-post

⁴² https://www.washingtonpost.com/business/economy/details-of-bezos-deal-to-buy-washingtonpost/2013/08/05/968a2bc4-fe1b-11e2-9711-3708310f6f4d story.html

⁴³ Schmidtke, H. (2018). Elite legitimation and delegitimation of international organizations in the media: Patterns and explanations. *The Review of International Organizations, 14*(4), 633-659. https://doi.org/10.1007/s11558-018-9320-9

⁴⁴ https://www.washingtonpost.com/opinions/2020/09/28/editorial-board-endorsement-joe-biden/

⁴⁵ http://news.bbc.co.uk/2/hi/europe/4295349.stm

⁴⁶ https://about-france.com/french-newspapers.htm

⁴⁷ https://www.eurotopics.net/en/148683/le-monde

⁴⁸ https://about-france.com/french-newspapers.htm

⁴⁹ https://www.eurotopics.net/en/148679/le-figaro#

The sample: Consists of all news articles (all sources) that mention the IEA during a ten-year period. An example could be a general reference to IEA analysis / statistics / publication, or a reference to or interview with an IEA expert. The selection are articles found in *The Guardian, The Times, The New York Times, The Washington Post, Le Monde* and *Le Figaro*. All newspaper articles are retrieved from Factiva⁵⁰, a global news monitoring database and search engine owned by Dow Jones & Company. Factiva consists of 36,000 news sources from 200 countries and includes content from well-known and less-known newspapers, archives, blogs and channels all over the world. All articles are read and coded by me.

Values: All values are dichotomous, which means that there are only two values to choose from (1 yes and 0 no). Here, N / A or "missing" is the same as "no".

Placement in the article: All variables apply to the entire article text. This means that I have to read through the entire article to complete the coding. This is more time consuming than just looking at the title or preface, but for the sake of my particular case this will be most appropriate.

Tone: An article can have a negative tone towards the IEA, a positive tone, a neutral tone or *both* a negative and positive in the same article (if for example the journalist/author weighs positive and negative statements against each other) in their evaluation of the organization.

-

⁵⁰ https://professional.dowjones.com/factiva/

Search Routine

I have chosen a simple search routine because I want the widest possible hit. All articles that mentions the IEA in some way or another are interesting for my case study. The search routine was written in English and French.

English search routine:

(Factiva): (IEA or I.E.A or (International adj1 Energy adj1 Agency))

French search routine:

(Factiva): A.I.E or (Agence adj1 internationale adj1 de l'énergie)) or (IEA or I.E.A or (International adj1 Energy adj1 Agency))

These are two example of Search Summaries from Factiva that matches my criteria:

Text	(IEA or I.E.A or (International adj1 Energy adj1 Agency))
Date	01/01/2010 to 01/01/2021
Source	Washington Post - All sources
Author	All Authors
Company	International Energy Agency
Subject	All Subjects
Industry	All Industries
Region	All Regions
Language	All Languages
Results Found	
Timestamp	

Text	(AIE or A.I.E or (Agence adj1 internationale adj1 de l'énergie)) or (IEA or I.E.A or (International adj1 Energy adj1 Agency))		
Date	01/01/2010 to 01/01/2021		
Source	Le Monde - All sources		
Author	All Authors		
Company	International Energy Agency		
Subject	All Subjects		
Industry	All Industries		
Region	All Regions		
Language	All Languages		
Results Found			
Timestamp			

Variables

Estimated time per. article: 3-7 min. (depending on length)

When using Factiva, keywords such as IEA are highlighted in yellow in the text. This

makes it easy to see which parts of the article that refers to the IEA.

BACKGROUND VARIABLES

ID-number

Comment: Each article gets is own ID number. This unique ID number is written down

on the article itself and in the sample coding form. This makes it possible to track the

articles afterwards.

Date: ååååmmdd

Newspaper

1. The Guardian

2. The Times

3. The New Work Times

4. The Washington Post

5. Le Monde

6. Le Figaro

Article type

Open text field

115

CONTEXTUAL VARIABLES

- 1. Crisis
- 2. Global Dialogue

LEGITIMACY VARIABLES

- 3. Expertise
- 4. Problem-solving
- 5. Collective gains

TONE VARIABLES

- 6. Negative tone against the IEA
- 7. Positive tone against the IEA

THEMATIC VARIABLES

- 8. Referral to IEA expert
- 9. Referral to Executive Director
- 10. Focus on Fossil Fuels
- 11. Focus on Non-Carbon Fuels

Explaining the variables 1 to 11

1. Is a specific crisis used to illustrate the story in the article?						
	0	N/A				
	1	Yes				
	ment:					
year crisis	period , Midd	Itextual stories use specific events to describe something. During the selected ter discount (between 2010 and 2020) I expected to find referral to oil crisis, nuclear reactor like East turmoil/Arab Spring, Libya crisis, covid-19 pandemic etc. These are all thave significantly affected the energy sector.				
2.	ls so	me sort of global dialogue used to illustrate the story in the article?				
	0	N/A				
	1	Yes				
Glob of glo clima simil	obal in ate co	ogue is defined broadly in the media content analysis and refers to various forms teraction and global cooperation on climate and energy issues. This might be afferences, climate summits, international agreements etc. Press releases and all gatherings in connection with new IEA publications does not count as "global"				
3.	3. Is the following source of legitimacy referred to (manifest / latent) in the article: Expertise?					
	0	N/A				
	1	Yes				
All re refer the I	ral to EA is c	to IEA knowledge production (reports, articles, analysis, forecasts etc.), and all IEA experts as a first-hand source of knowledge are coded as "expertise". When ited as provider of facts and information with regards to any kind of energy ue, it is coded as "expertise".				

- 4. Is the following source of legitimacy referred to (manifest / latent) in the article: Problem-solving?
 - 0 N/A
 - 1 Yes

Comment:

Sometimes the organization does more than highlighting a problem or stating a fact. Sometimes it also provides recommendations for how to solve the problem or suggests energy policies that should be in place. This is what "problem-solving" means in this analysis. A specific energy advice to governments/industry/civil society is considered problem-solving. Calls or warnings where the IEA points out practices/policies/agreements etc. that need to be improved are also interpreted as problem-solving. An IEA decision to release strategic emergency stocks is considered a concrete example of problem solving.

Illustrative example from the data material: The IEA reiterated its call for new inefficient coal-fired power plants to be banned to help the world restrict itself to 0 degrees of global warming.

- 5. Is the following source of legitimacy referred to (manifest / latent) in the article: Collective gains*?
 - 0 N/A
 - 1 Yes

Comment:

A legitimate IO authority needs to create beliefs that it pursues an underlying social purpose in an impartial way⁵¹. If the strategy of the IEA is to become a *global* legitimate actor on energy issues, it is expected that that the organization grounds its expertise and problem solving on an underlying global purpose.

What qualifies as "collective gains"?

Examples might be problem-solving that benefit more than the OECD/IEA countries such as *fighting climate change*, achieving *shared universal goals*, *universal access to electricity*, and *global economic recovery*. "Global economic recovery" is a case of doubt that I discuss in the thesis. It was sometimes mentioned as the purpose behind a particular action, e.g. new energy policies in the wake of the covid-19 pandemic and thus coded as global

^{*&}quot;Common good" is another frequently used name for collective gains in the literature. These are equated in my analysis.

⁵¹ Zürn, M. (2018). A Theory of Global Governance: Authority, Legitimacy, and Contestation. Oxford University Press. https://doi.org/10.1093/oso/9780198819974.001.0001

collective gains. But economic recovery in general does not qualify as a global collective gain as long as it is not portrayed as a benefit for the entire global society.

In the data material there are many referrals to the release of strategic stock in 2011. If the IEA defended the action based on a purpose to regain *global* economic recovery, it was coded as a collective gain. It the article was more concerned with conveying a message of stabilizing the oil sector or recovery of IEA-member economies it did NOT qualify as a global collective gain. As er see, the distinction between what is considered a collective gain and what is not is subtle in these cases and must be understood in the correct context.

6.	Are NEGATIVE words and	phrases used to	describe the IE	EA?
----	------------------------	-----------------	-----------------	------------

- 0 N/A
- 1 Yes

Comment:

There are many ways to determine tone (negative/positive publicity) in media analyses. Schmidtke⁵² says a negative/positive legitimation statement must contain a "because". For example: "The IEA is **not** a legitimate organization" **because**" it undermines renewables. Or in the opposite case, "The IEA **is** a legitimate organization "**because**" it has the best available data on all energy sources". I have chosen to use similar criteria when assessing negative and positive tone in this media content analysis.

7. Are POSITIVE words and phrases used to describe the IEA?

- 0 N/A
- 1 Yes

Comment:

See comment in variable 6.

8. Referral to cited source: IEA expert

- 0 N/A
- 1 Yes

⁵² Schmidtke, H. (2018). Elite legitimation and delegitimation of international organizations in the media: Patterns and explanations. *The Review of International Organizations, 14*(4), 633-659. https://doi.org/10.1007/s11558-018-9320-9

Comment:

This variable is meant to capture every time an IEA expert is directly quoted or mentioned in the media coverage on behalf of the IEA. If the journalist/author choose to include expert citations/expert interviews it is believed that the reader "gets closer" to the organization. An expert interview in particular is believed to reduce the risk of misinterpreting the facts.

9. Referral to cited source: Executive Director

- 0 N/A
- 1 Yes

Comment:

This variable is meant to isolate the times when the head of the IEA speaks or is mentioned in the media coverage on behalf of the IEA. This is a variable that separates referral to IEA executive director from the rest of the IEA experts and will and will say something about the extent to which the leader appears as a spokesman for the organization.

10. Does the article have a special focus on fossil fuels?

- 0 N/A
- 1 Yes

Comment:

Focus on fossil fuels covers the traditional carbon energy sources which emits greenhouse gasses to the atmosphere, mainly oil, coal, and gas.

11. Does the article have a special focus on non-carbon fuels?

- 0 N/A
- 1 Yes

Comment:

Focus on Non-carbon fuels first and foremost covers renewables, but also nuclear which is considered as clean source of energy by the IEA as long as safety measures prevents disasters such as the ones in Chernobyl and Fukushima.

Variables 10 and 11 are included to learn more about how media portrays the IEA with regard to focus areas.