# Abstract

This anthropology thesis explores Belgium’s ongoing nuclear phaseout, a process shaped by policy changes, geopolitical influences, and energy demands. It examines the multifaceted realm of nuclear energy and its phaseout, shedding light on the intricate relationship between power structures, local communities, and global contexts in shaping public narratives and truth regimes regarding nuclear energy. Framed by Michel Foucault’s regimes of truth and Dominic Boyer’s concept of energopolitics, the research explores the production and enforcement of nuclear narratives among my Doel interlocutors. Through an analysis of individual energy experiences and attitudes, the study identifies and defines truth regimes within Doel’s context by scrutinizing the sociocultural landscape and energopolitics of the nuclear phaseout. Resulting in an exploration of potential contradictions or inconsistencies within and between these truth regimes, governmental initiatives, and public interests. In essence, this research provides a comprehensive understanding of nuclear energy’s complexities, offering valuable insights into the challenges, aspirations, and tensions surrounding Belgium’s transition away from nuclear energy.

**Keywords:** Nuclear energy, energy anthropology, energopower, Foucault, policy, truth regimes

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To the town of Doel, as both a tangible entity and symbolic site of nuclear tension in Belgium. Over the last year, I have seen the promise of growth and the threat of decay change your landscape, and I hope for a brighter future for you.

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# Introduction

Nuclear energy, a complex and multifaceted subject, often receives attention from technological, scientific, and political viewpoints while frequently overlooking the social and cultural dimensions that shape public perceptions and local responses. While discussions on nuclear energy typically emphasize its destructive nature by focusing on historical incidents like Fukushima or Chernobyl, the intricate relationship between contemporary energy grids and the prevailing fears of nuclear meltdowns contributes to a complex public stance toward nuclear energy.

Since 2003, the Belgian government has navigated the intricacies of implementing, revising, and postponing the phaseout of the nuclear power plants. This dynamic process has been influenced by shifts in Belgium’s political coalition following each election, geopolitical events within Europe, and the persistent demand for stable, cheap energy for both residential and industrial sectors. The impending complete phaseout of nuclear energy means the loss of nearly 50% of Belgium’s existing energy production, necessitating a transition from nuclear to renewable sources, and, notably, a reversion to fossil fuel-based energy generation. Through an anthropology lens, this thesis explores the various narratives surrounding nuclear energy and Belgium’s nuclear phaseout, revealing the complex relationship between power structures, local communities, and the broader global context (Sovacool 2016:1). While Belgian residents express a collective desire for sustainable energy sources, the current energy crisis not only compels a reevaluation of their energy behaviors and financial strains due to expensive electricity bills, but also prompts a reexamination of their attitudes toward nuclear energy.[[1]](#footnote-2)

By focusing on the Belgian town of Doel and its surroundings, this thesis explores the varied public sentiments regarding Belgium’s nuclear phaseout. This spectrum of opinions, narratives, and values presents a comprehensive overview of narratives about nuclear energy and Belgium’s phaseout policies. The aim is to determine whether a disconnect exists between governmental initiatives and public preferences, offering insight into the multifaceted nature of nuclear energy as it intersects with individual beliefs and collective aspirations for the future, and shedding light on the potential disparities between the two parties. Engaging with the complex topic of nuclear energy necessitates a more inclusive and holistic approach to discussing this technical and scientific problem by considering the voices and values of my participants in Doel as well as pro-nuclear advocates. In doing so, this research seeks to examine how individuals perceive and navigate the nuances of the nuclear phaseout and the broader concept of nuclear by focusing on the underlying challenges, aspirations, and tensions surrounding this energy transition away from nuclear energy.

There are several ways that this thesis could have approached the topic of nuclear energy and the nuclear phaseout, from a strictly policy-focused analysis, a posthuman explanation on the nuanced human-nuclear energy relationship, or an examination into the imagined futures of my interlocutors with their aspirations for sustainable and clean energy. However, this research project instead explores the distinct regimes of truth present among my interlocutors in Doel to define their narratives concerning nuclear energy, including their anxieties and apprehensions about its dangers, and the energopolitics of the nuclear phaseout. This includes an examination of how Belgian power structures present and enforce specific narratives surrounding nuclear energy. The issue of the nuclear phaseout is a multi-dimensional process that serves as a representation of Belgian policy and prompts further consideration into how energy policies might paradoxically contradict societal needs while simultaneously constructing a collectively accepted narrative, or truth, concerning nuclear energy’s politics and power dynamics.

This study navigates the meanings and narratives constructed by both visitors and residents of Doel in relation to the broader influence of the Belgian state regarding the nuclear phaseout and energy crisis. The lens of Michel Foucault’s regimes of truth aids in dissecting the production and enforcement of these truths, and Dominic Boyer’s concept of energopolitics assists in adopting a bottom-up perspective to structure an analysis of the Belgian nuclear phaseout, emphasizing the relationship between energy and political power in shaping the social organization and nuclear narratives of the people. While individual beliefs and understandings are shaped by hierarchies of power, external influences, such as the Russian-Ukrainian conflict’s impact on the supply of affordable energy across Europe, also play a role. Additionally, the portrayal of Doel’s desertification negatively associates the nuclear reactors with destruction, despite their minimal contribution to the town’s current state of abandonment. These energy cultures help unveil how external influences impact individual energy experiences and their social understanding of energy, which, in turn, allows for an analysis of the nuclear phaseout’s impact on people’s daily lives and their energy relationships.

The thesis structure unfolds as follows: the initial sections provide an overview of Doel’s historical context and nuclear energy’s role in Belgium, both of which serve as a foundation for understanding the meanings and narratives affiliated with nuclear energy among my interlocutors, its significance within Belgium’s broader energy grid, and the ramifications of international conflicts on the energy supply. The historical context reveals the multifaceted dimensions of nuclear energy and its implications for the past, present, and future. Followed by a thorough review of literature pertaining to the anthropology of nuclear energy, Dominic Boyer’s energopolitics, and Michel Foucault’s regimes of truth serve as a guiding framework for presenting the data. Core concepts, such as power structures and various truth regimes, are identified to facilitate the interpretation of my interlocutors’ nuclear narratives. Furthermore, an exploration of my fieldwork and empirical data helps to define the regimes of truth operating within Doel’s context concerning nuclear energy and the nuclear phaseout. Ultimately, the thesis concludes by analyzing potential contradictions or inconsistencies within and between these different truth regimes.

# Doel: Abandoned Town and Site of Nuclear Tensions

*The land between the Port of Antwerp and the quiet fields of the East Flanders province is divided by a two-lane road: on one side, green farmland speckled with wind turbines and the occasional house; on the other, walls of shipping containers and constant semi-truck traffic border the port, with robotic cranes hovering over the river Scheldt and industrial warehouses made of concrete. For almost thirty minutes, the road traverses the line of nature and industrialization, with nothing notable about the landscape until a roadblock pops up at the town limits, yet the town is still nowhere in sight.[[2]](#footnote-3)*

*After a scenic and quiet drive seemingly far away from other towns, the billowing white smoke from the reactors in the distance are the only noticeable landmark across fields and walls of trees. At this point, with every driver I travelled with to access the site, they all asked, “Are you sure this is the right place?”*

*After scanning an identification card to remove the barrier and access the town, we near the power plant and designated visitors’ parking lot, the three blocks of crumbling buildings and muted streets that make up the town of Doel come into sight. A heavy array of telephone lines covers the sky above the town like a spiderweb, matched with a wall of wind turbines on the opposite shore of the Scheldt River. Peering through the buildings and looming over the small town’s skyline is the smothering white smoke of the Doel nuclear reactor only a few minutes away. The ominous uncertainty and slight anxiety of being so close to a functioning nuclear reactor is part of the tourist experience.*

*In the several hours since I arrived, I had circled the blocks countless times,[[3]](#footnote-4) photographing the graffiti tags and artwork that litter the walls and metal barricades over the doors and windows. Despite the tourist note on Doel’s website describing the excessive presence of graffiti as a public “outdoor museum,”[[4]](#footnote-5) the spray-paint art is less than impressive as I walk by walls of practiced stencil designs, abstract faces, and a hallucinogenic painting of a frog on a mushroom. I pause at every image related to the nuclear plant, most artistically depicting the reactors as threatening with heavy plumes of smoke, toxic and radioactive warning symbols, and apocalyptic quotes like “Welcome to Planet B” and “No life only hell.”*

*A painting on a brick wall

Description automatically generated* *A sign on a wall with graffiti

Description automatically generated*

Left: Painting of the Doel reactors with a crane in the foreground, with the words “No Nuk! No life onely Hell” written over the image. Right: “Welcome to Plant B-earth” is written on a blank space of wall, surrounded by other graffiti tags. (2022, October 11)

*It’s been over an hour since I last saw another person, beyond the few locals socializing in the Doel 5 Bar, the only open business/restaurant in town[[5]](#footnote-6), but they weren’t too keen on talking to me as both a researcher and non-Dutch speaker. Earlier in the day, I saw a couple walking a large dog enter the same street as me, but they changed directions once they saw me, avoiding potential confrontation with another tourist in this empty and elusive town. I was used to it, though, as most visitors steered away from other people as if concerned their presence was prohibited or unwelcome to the town and its residents.*

*In the distance, a single figure weaves up and down the hollow streets, stopping for pictures of random wall art or a glimpse inside the decrepit homes. I note his presence and continue my walk, trying to linger a little longer at certain pieces of graffiti to appear casual, but I move a little quicker to try to plan my route to eventually cross paths with the stranger in hopes of conversation.*

*Finally, after several long minutes and pacing along the streets, the hooded figure makes his way down the same street as me. He walks close to the wall of buildings on the opposite side of the street, as far away from me as possible, but I wave and smile anyway. “Hi! Spreekt u Engels?” I ask, in the best Dutch I can muster, hoping the stranger can sympathize with my attempted Dutch.*

*A brief look of hesitation crosses his face as I approach him, and he slows his walk. The few seconds that pass seem to take forever before he quickly responds “No,” and hurries away.*

*I try not to let my brief feeling of disappointment show as I walk away from him, ignoring the frustration of yet another person deciding not to talk to me. At the end of the street, I pause to look between the houses at the smokey reactor in the distance, noting the darkening sky and the lack of streetlights to guide my way through the rest of my evening in the abandoned town.*

Fortunately, not everyone shunned me during my visits to Doel, but I encountered both challenges and opportunities in collecting data due to the unsettling atmosphere of the abandoned town, overshadowed by the presence of the nuclear plants. Despite this eerie environment, Doel served as a geographical center for my research and represented a key site for understanding contemporary nuclear attitudes due to its historical and current political processes shaping its current state (as explored further in the next section “Nuclear Energy in Belgium”).

It is important to clarify that when referring to Doel as “abandoned” or “deserted,” I am using these terms colloquially, as the town still has active residents. In 2021, there were 19 people living in Doel, and 91 residents in the immediate surrounding area (Statbel 2022). Historian T. Lindsay Baker defines a ghost town as “a town for which the reason for being no longer exists” and one that has undergone periods of decline and loss due to economic, natural, or manmade disasters (Baker 2003). An abandoned town can vary in its residential population, ranging from having no active residents to potentially housing thousands. However, the specific criteria defining a “ghost town” remains a subject of debate. While the Beveren municipality does not officially label Doel as abandoned or as a ghost town, external sources, including Belgian media[[6]](#footnote-7) and my interlocutors, often refer to it as such. Considering Baker’s criteria, I find the term “abandoned” appropriate for Doel’s historical context.

The history of Doel is marked by challenges arising from the Port of Antwerp’s extension plans in 1965. Due to Doel’s strategic location along the Scheldt River for maritime trade into Europe, the Port of Antwerp proposed an expansion of their harbor by demolishing the town to make way for petrochemical industrial industries. As a result, the opening of new businesses and construction of buildings were banned, signaling the systematic phase-out and eventual abandonment of Doel. Over the past six decades, most residents sold their homes after seeing the development plans as unavoidable and inevitable, but some people resisted moving away from Doel, thus halting the demolition plans. The expansion of the port continuously threatened the town’s future with periods of inactivity or even delaying the plans altogether. In September 2009, the right of residence was officially removed from Doel, prohibiting people from living there (Van Poucke 2009). This decision was later reversed on March 30, 2022, when the Port of Antwerp withdrew its extension plans (Paelinck 2022). The cancellation of the port expansion and the subsequent demolition of Doel involved a compromise with the town, allowing the extension of the container harbor to some of Doel’s docks.

The removal of the port’s demolition plans sparked hope for the town’s revival, leading to new business opportunities like the restoration of the Hooghuis monument[[7]](#footnote-8) and renovation of the Atelier de Nijs. This building, after being vacant for 30 years, is set to become a studio warehouse with a focus on restoring the art of shipbuilding by working with a combination of experts from different fields (such as engineering, woodworking, plumbing, etc.). The compromise by the Port of Antwerp and the significance of ships in Doel’s docks fuels the hope for entrepreneurial revitalization in the town, beginning with the Atelier de Nijs.

However, amidst the promise of change, on June 4, 2023, the town’s only bar and restaurant, the Doel 5 Taverne, shut its doors. The manageress explained that the decision to close was driven by exhaustion from the continuous struggles in Doel’s chaotic history: “Either you hope things will get better one day, or you make the rational decision to quit. After 35 years I am also tired of fighting, with all the vicissitudes that Doel has already gone through. We’ve been thinking about the future of the café for a while, and now we’re taking the plunge to close” (Houcke 2023). The closure of the Taverne means losing access to the only place to grab food or a drink, further limiting the activities of visiting tourists. Although the threat posed by the Port of Antwerp has diminished, a new political challenge looms over Doel: the phasing out of the nuclear power plants, which adds another layer of uncertainty to the town’s future. The duality of business openings and closures mirrors the historical uncertainty surrounding Doel’s existence and prospects, but also offers valuable insights into the lived experiences of its residents amidst significant political and social changes.

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# Nuclear Energy in Belgium

The first commercial nuclear power plant, Doel 1, was established in Belgium in 1974, followed by the construction of six more reactors within the next decade to expand the power grid. Belgium’s nuclear energy production mainly centers around two sites: Doel and Tihange, situated near the Dutch and German borders, respectively. Additionally, a third site in Dessel manages nuclear waste and hosts various research institutions focused on nuclear technologies. Electrabel, a subsidiary of Engie (a former Belgian company now owned by the French), owns and operates the Doel and Tihange sites, as well as other forms of energy production in Belgium including nuclear, renewable energy, and natural gas/coal. In 2022, nuclear power accounted for nearly 47.3% of Belgium’s overall production of energy, with gas-fired fuels constituting 26.9%, and solar and wind making up another 20.8% of the total energy supply (Vanhecke 2023). While nuclear energy remains a significant source of power, its contribution to Belgium’s energy mix is declining due to the gradual shut down of reactors and the increasing favorability of renewables.

The phaseout of the nuclear reactors emerged as a topic of discussion in 1999 when the Belgian Green Party first raised the idea. Subsequently, Belgian legislation known as the “Deleuze Law” was passed in 2003, initiating the denuclearization process by mandating the closure of nuclear power plants either after 40 years of total operation or by 2025 at the latest (Belgisch Staatsblad 2003). The objective of this nuclear phaseout was to enhance energy security in Belgium while accelerating the transition towards climate neutrality by reducing the country’s dependence on fossil fuels and energy imports (Poels 2022). However, the gradual shutdown of nuclear reactors has paradoxically produced the opposite result: namely, an increase in fossil fuel consumption to compensate for the loss of nuclear energy while renewable energy infrastructures are being developed (Bernard 2022). Additionally, geopolitical events, like the Fukushima nuclear disaster in March 2011, have influenced the policy’s trajectory, caused delays and required stress tests to ensure safety and preparedness for potential natural disasters (Vanhecke 2023). For example, the Fukushima disaster had a significant impact on the decision for extending the operation of the Belgian nuclear reactors because of the emergency assessment of the reactor’s vulnerability to earthquakes and other natural disasters to ensure that a similar incident would not occur on Belgian soil.

In the aftermath of the Fukushima accident, the original plans for the phaseout of the seven nuclear reactors in Belgium underwent fluctuations with each new election, leading to debates over whether to extend certain reactors or seek other environmental and economic agreements that influenced the perception of the relevance of nuclear plants. However, in 2020, Belgium’s new Prime Minister, Alexander De Croo, supported by a coalition of political parties including the Liberal, Sociality, Green, and the Flemish Christian Democrats, confirmed the complete nuclear phaseout by 2025 (World Nuclear News 2021). Despite facing criticism from other political parties, nuclear organizations, and the public, the Green party emphasized that the nuclear shutdown was “not an ideological” decision but rather a technical one, presenting it as a practical plan for Belgium’s energy future and separate from the long-standing political debates on the topic (Moens 2021).

To prepare for alternative energy sources after the nuclear phaseout, the Green party collaborated with Engie and the Belgian towns of Awirs and Vilvoorde to plan the (re)construction of gas-fired (fossil fuel) power plants, aiming to prevent future energy crises or total power blackouts once the nuclear plants were officially phased out (Carter 2022; Belgium Nuclear Forum 2019). The selection of these towns was based on their vast land coverage that historically housed electricity production, such as Vilvoorde in the 1960s, and aligns with Engie’s long-term strategy to ensure the country’s energy security during the nuclear phaseout (Engie 2020). However, the reliance on oil and gas to phase out nuclear energy and transition to renewable sources highlights the short-term energy politics ensuring continuous energy supply and production. This approach raises concerns about its long-term impact on climate goals, given the increasing investment in gas-fired plants that risks re-establishing a fossil fuel dependency that the European Union has sought to break free from for several years. While pre-emptive planning to secure Belgium’s energy supply is seen as a positive tactic, the reintroduction of fossil fuels as an energy source raises concerns about the negative effects on the climate, contributing to CO2 emissions and pollution. This decision presents a challenge in navigating the complexities of energopolitics and achieving a sustainable energy transition in the pursuit of climate neutrality.

In the “Belgium 2022: Energy Policy Review,” the International Energy Agency recommended that the Belgian government reassess and amend the nuclear phaseout policy to develop a national strategy for decarbonizing the gas sector, ensuring a secure electricity supply during and after the nuclear phaseout, and supporting the robust deployment of renewable energy to meet energy transition goals (Birol 2022:14). Meeting carbon emission targets as per the Kyoto Protocols (United Nations Convention on Climate Change 2005) and the Paris Agreement (European Commission 2021) would be challenging without nuclear energy sources to satisfy energy demands while achieving climate objectives, as argued by the IEA (Birol 2022:42). Additionally, Bruegel, a European think tank in economics, argued that postponing the nuclear phaseout could lead to reduced fossil fuel usage and increased energy production capacity, facilitating cross-country energy sharing to assist other countries with their nuclear phaseouts or energy crises. By questioning the logistics of Belgium’s nuclear phaseout, both the IEA and Bruegel urge the government and policymakers to reevaluate the current energy plans, considering potential future energy strains, climate goals, fossil fuel reliance, and energy import implications.

The European energy crisis, sparked by the Russian invasion of Ukraine in February 2022, exacerbated Europe’s energy challenges as Russia suspended oil and gas deliveries to member states of the European Union that opposed the war. In response, the European Council banned almost 90% of Russian oil and gas imports (Concilium Europa 2023). Individual countries had to adjust their energy mixes to transition away from fossil fuels and develop effective renewable energy sources. In Belgium, the energy crisis compelled a reevaluation of the nuclear phaseout policy, as the original plan to transition to gas-fired power plants became unreliable and insecure for the near-future energy supply (Belga 2021). Elia, the Belgian electricity systems operator, published its annual “Adequacy Report” on Belgium’s energy supply and the impact of the nuclear phaseout in 2021, suggesting a possible dependence on German energy imports for fossil fuel production until sufficient renewable energy infrastructure was established in Belgium (Elia Group 2021:17). However, to further complicate the phaseout plans, Belgian cannot currently rely on Germany energy imports as originally planned because Germany is undergoing its own energy crisis due to strained relations with Russia in addition to their own active nuclear phaseout (Weise 2023). Consequently, the Belgian government extended the closing dates of the Doel 4 and Tihange 3 reactors by ten years (now set to close in 2035) to address the energy crisis and allow time for a new energy transition strategy to be devised.

However, despite the energy crisis, the shutdown of the Doel 3 and Tihange 2 reactors proceeded, as phasing out a reactor is an irreversible process taking at least six months, making it too late to petition for extension. On September 23, 2022, the Doel 3 reactor was the first to shut down completely, triggering pro-nuclear responses from Belgian press (such as the Brussels Times) and organizations critical of the government’s continuation with the phaseout amid the energy crisis (Taylor 2022). Stand-Up for Nuclear, in collaboration with other pro-nuclear organizations like Keep the Lights On and 100TWh, hosted a protest on the day of Doel 3’s closure to advocate for nuclear energy’s promise as a clean and stable energy source (Stand-Up for Nuclear 2023). The protest, attended by over a hundred demonstrators and covered by multiple media outlets, included a symbolic “funeral” for the Doel 3 reactor. Protest signs displayed calculations showing the energy lost with the nuclear phaseout, comparing energy amounts of carbon emissions and flight equivalents to visualize the consequences of the shutdown (Belga 2022).

A row of white paper tags next to a body of water with a factory behind it

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Photo from the Stand Up for Nuclear “funeral” of Doel 3 with each individual sign mentioning a different comparison about how much energy will be lost with the shutdown. (Stand-Up for Nuclear 2023).

Various pro-nuclear activist organizations aim to influence policymaking and public opinion by hosting educational events for the local community and publishing scientific reports on the impact of the nuclear phaseout. There are eight main pro-nuclear organizations in Belgium, each focused on different aspects such as nuclear technology research (Belgian Nuclear Society, the Belgian Nuclear Forum, and SCK-CEN), the future of nuclear energy (Horizon 238, 100TWh, and Stand-Up for Nuclear), the general energy debate (Keep the Lights On), and climate change initiatives (WeCare). On the other hand, there is only one main anti-nuclear organization in Belgium: The International Campaign to Abolish Nuclear (weapons) (ICAN), which is part of a global coalition promoting the United Nations’ “Treaty on the Prohibition of Nuclear Weapons.” While Belgium is a member of ICAN, it has not yet signed the treaty (Poels 2022). Additionally, in 2017, ICAN received the Novel Peace Prize for raising awareness about the “catastrophic humanitarian consequences of nuclear weapon use” (ICAN 2017). The contrast between the number of pro-nuclear organizations and the single anti-nuclear organization in Belgium indicates the prevailing pro-nuclear attitudes among people and policymakers. These organizations contribute to the narratives surrounding the nuclear phaseout by targeting the public and challenging the actions of the Belgian government. They operate within the dynamic between the public and power structures, using social power tactics to unify the population around shared beliefs regarding nuclear energy while seeking more influence in the energy debate. Combining this information with the contextual background of Doel’s history and nuclear energy in Belgium will help to understand the origins, causes, and changes in attitudes toward nuclear energy in Doel and its reflection of the larger nuclear discourse in the country.

# Anthropology of (Nuclear) Energy

As the world becomes increasingly reliant on advanced technology and electricity, the importance of sustainable energy production is influenced by factors like climate change, energy transition policies, and ensuring continuous access to electricity for society. While “energy” is often associated with what it enables us to do and how it enables our goals (Strauss 2013:12), such as charging phones or turning on the lights, it also pervades both the natural world and human-made technologies to shape our cultural meanings and relationships with different types of energy.

In the 1940s, Leslie White was one of the first anthropologists to explore the concept of energy and cultural evolution, suggesting a correlation between the amount of energy consumed by a society and its technological advancements. Although cultural evolution has been criticized for its Eurocentric bias and reductionist approach, White’s research highlighted the implications of finite resources and increasing energy demands (White 1943:339). He argued that anthropology only studied energy during times of energy or climate crises, such as the oil crisis of the 1970s, which emphasizes the need for reflection on our relationship with energy and further research its impact on social life (Jasper 1990:5). Energy has become such an integral part of our modern lives that we often take it for granted, only becoming aware of its significance when confronted with issues like limited energy supply or higher utility bills. This research takes place precisely in a historical geopolitical context where (cheap) energy supply is threatened; it is precisely in this context that I started an active reflection on our relationship with energy to understand how it impacts various aspects of our social life.

In the 1970s, Laura Nader revolutionized anthropology’s role in scientific disciplines by studying nuclear scientists and their understanding of energy in society. These scientists held firm beliefs, such as the idea that “new sources of energy will improve our lives” (Nader 1978:1), a perspective that mirrors Leslie White’s cultural evolution where energy is a symbol for societal advancement. However, Nader instead adopted a holistic approach to energy to understand how energy issues are not solely technical but are socially and politically constructed. Moreover, she examined the implications of different energy sources on global and social environmental change, emphasizing that energy is fundamentally a social concern (Nader 2018:42). As a result, Nader identified a contradiction between the politics of energy and societal attitudes towards energy, revealing a disconnect that calls for deeper anthropological insight and multidisciplinary approaches to comprehend the “human dimensions of energy issues” and the impact of energy on “dramatic and rapid changes in American lifestyles” (Nader 1978:1-2). Nader’s research encourages professionals to introspectively examine their mindset problems (Nader 2018:43), enabling the development of a holistic understanding of the roles of energy, both in general and specific contexts, within society.

More recently, some anthropological studies focus on specific sources of energy, such as the cultural significance of wind power and the complexities of promoting renewable energy while maintaining traditional exploitative practices (see also Franquesa 2018; Boyer 2019). Alternatively, the study of nuclear energy may solely focus on the socio-cultural impacts of major historical nuclear events like the Cold War, the Fukushima nuclear accident, and the Hiroshima bombing. The social memory and reflection of these past events influence contemporary social attitudes towards the general idea of nuclear, where the extreme nuclear incidents shape social narratives towards “nuclear” topics as inherently dangerous (De Munck 2022:3). Through the exploration of various narratives towards nuclear energy, this thesis uses an anthropological lens to analyze the factors that influence energy meanings and values to facilitate a more effective and culturally sensitive energy transition at both local and national levels.

## Energopolitics

The perception and engagement of humans with nuclear energy are shaped by their relationships with nonhuman energy infrastructure, both tangible and intangible, and the socio-cultural narratives constructed by historical events, politics, policy, and academia (Adams 1978:307). Dominic Boyer’s concept of energopower is a concept that rethinks political power through the lens of electricity and fuel, offering a genealogy of modern power by exploring how the politics of energy shape energy cultures and infrastructures in response to historical events and environmental complications (Boyer 2014:326). Energopower challenges anthropocentric models of intervention on climate change and instead highlights how certain energy sources, like carbon and nuclear, impact the biopolitical regime (Boyer 2015:533). Boyer also introduces “energopolitics,” a term that reflects the political management of both energy structures and the population within a society in the same way that Michel Foucault’s biopolitics/biopower explores the political structures that manage subjects (Foucault 2004:1, as cited in Szeman 2014:454). Inspired by Michael Foucault’s concept of “biopower,” which pertains to the management of life and population, Boyer applies this paradigm to the concept of the Anthropocene by challenging “contemporary biopower to think beyond narrowly anthropocentric models of intervention” and how certain energy sources, like nuclear, have significantly impacted the biopolitical regime (Boyer 2015:533). While energopower challenges the anthropocentric perspective of biopower and power structures by considering how the politics of energy influence and manage the population, energopolitics delves into the political regimes and processes of subjectification that intersect with energy dynamics.

Boyer’s concept of energopower underscores the significance and urgency of reevaluating how governments and populations use and interact with energy by highlighting the impact of anthropogenic climate change. The Anthropocene, as a geological epoch, comprehensively analyzes the consequences of human activity on Earth, positioning humans as the dominant force driving ecological changes in scientific and socio-cultural contexts (Crate 2011:176). Shifting the focus of power from human control and management to the authority of the environment exposes the detrimental effects of human activities on the planet and sheds light on the influence of specific actors, such as companies, states, scientists, activists, and individuals, on the environment (Szeman 2014:458). Efforts to mitigate anthropogenic contributions to global warming and climate change mainly stem from international power structures that encourage local populations to adopt new habits and transform their relationship with energy. These efforts include raising awareness about waste and carbon emissions and reducing reliance on fossil fuels through the adoption of renewable energy sources (Heffron 2017:664). In contemporary climate-related research, there is a prioritization of an anthropological, bottom-up approach to energy politics and policymaking: this approach involves exploring people’s attitudes and understanding of specific energy concepts to facilitate large-scale changes (Maslin 2004:147, as cited in Chakrabarty 2009:212). Thus, energopolitics is rooted in concepts like the Anthropocene, allowing for reflection on the impact of past human activities and guiding present actions to mitigate climate change through both top-down and bottom-up power structures.

The political control over energy processes by power structures necessitates an anthropological, bottom-up approach to understanding the role of energy in people’s daily lives and how specific narratives about energy shape their subjectification to energopolitical processes. Boyer asserts that energopolitics involves a circular relationship between politics and energy: energy consumption and demand influence state power, leading to the construction of energy infrastructures funded by political initiatives, which in turn creates further demand for energy, perpetuating the cycle (Boyer 2019:19). This relationship between individuals, society, and power structures reveals the control exerted over energy infrastructures and how the value and meaning of energy are defined within historical discourses that persist in the contemporary world (Sovacool, et al. 2017:686). However, it is the societal meanings attributed to energy that determine its value in economic, technological, political, and social spheres (Boyer 2019:16). These narratives about the function and use of energy are influenced by government interests aiming to shape the opinions and beliefs of societies, as well as by individual agency and personal relationships with energy (Smith 2017:4). Since energy is both a tangible thing and an intangible concept, the ways people engage with it may not encompass all possible perspectives on energy policies, transitions, environmental impacts, and the different types of energy structures (Boyer 2015:532). The concept of energopolitics applied in anthropological research may contribute to a critical examination of how power dynamics and energy politics shape policies that address national energy needs and their short- and long-term impacts (Adams 1978:301). Consequently, energy structures become culturally recognized systems of meaning reflecting the power relations between the state and its population, where the former has the power to create truth regimes and narratives about energy that influence policy decisions and attitudes towards energy.

In Belgium, energy politics are shaped by political interests and technical infrastructures, and are embedded in historic debates surrounding the nuclear phaseout. While these top-down policies aim to facilitate an energy transition, they may not effectively meet the needs or desires of local populations, leading to dissatisfaction with the integration of such energy politics (Heffron 2017:661). Achieving a successful transition to renewable energy sources requires addressing the politics of energy on scientific, technological, economic, and socio-cultural levels, ensuring multidisciplinary solutions that are effective and sustainable for all segments of society. Thus, implementing an effective energy transition requires the construction of appropriate regimes of truth. By examining both the perspectives of those in power and individuals, energopolitics offers a valuable opportunity for ethnographic research, allowing for the exploration of localized communities within a broader cultural and political context. This approach sheds light on how the flow of energy directly and indirectly influences socio-cultural relations between people and power structures. Referring to Boyer’s concept of energopolitics, this thesis delves into how state power manages energy infrastructures and shapes the relationship between individuals and energy. This lens aids in identifying and defining the narratives surrounding nuclear energy and the nuclear phaseout through my interactions with the people of Doel.

# Truth, Power, and the Production of Subjects

Nuclear technologies are used in a wide range of realms, including energy and weapons, whose social and cultural meanings are shaped by historical events, current energy debates and crises, and social/political narratives about the relevance of “nuclear” in the contemporary world. To understand the multiple, conflicting narratives regarding nuclear energy, this research uses Michel Foucault’s concept of the regimes of truth to analyze how my research participants in Doel interpret and understand nuclear energy in the context of the nuclear phaseout, marked by a series of discourses, political debates, and specific policy decisions. This section first defines the concept of truth regimes by both Michel Foucault and contemporary researchers, followed by insights into the relationship between power, truth, and the production of subjects, then an in-depth overview of Lorna Weir’s four different regimes of truth (veridical, mundane, symbolic, and governmental) which will structure the presentation of empirical data in the next chapters.

Michel Foucault coined the concept of the regime of truth to understand the origins of specific truths, types of power, and the subjectification processes that occur when power is exercised onto an individual or a society. Specifically, he contends that “each society has its regime of truth, its ‘general politics of truth’ – that is, the types of discourses it accepts and makes function as true” (Foucault 2000:131). To Foucault, truth is a “system of ordered procedures for the production, regulation, distribution, circulation, and functioning of statements” that takes on different forms depending on the historical/contextual circumstance (Foucault 1976:14). The “regime” of truth stems from the ways in which truth is “produced, sustained, and regulated” by techniques and procedures that are situated in power relations to manage and produce the subject through a scientific, almost standardized system that regulates the effects of power (Lorenzini 2015:3). Truth and power thus exist in a circular relationship where power structures manage the conduct of society and the subject, while truth produces and maintains the effects of power by shaping the experience of the subject.

Foucault’s other criteria for identifying and defining truth regimes involve the relationship between power and the “subject.” The “subject” is defined as both an individual’s own identity as a result of having a “conscience or self-knowledge,” as well as being a subject, or subjected, to someone else by control and dependency (Foucault 1982:777). The differences in subjectification regarding truth regimes are related to the strength and validity of certain powers: whose voice is heard and accepted as truth? What role does truth play in the lives of individuals? Who creates truth? Who is considered qualified to speak the truth? These questions, which explore the aforementioned relationship between truth and power, are the basis of Foucault’s main goal, namely the reconstruction of the “history of the different modes by which, in our culture, human beings are made subjects” (Foucault, 1997:297). Truth regimes are thus the product of power to produce subjects and certain narratives that originate in historical or social contexts to control the actions of subjects and the organization of society.

However, contemporary researchers argue that Foucault’s truth regimes are much broader than he originally argued, encompassing various types of power relations and different forms of truth that are not only scientific or absolute but also political, religious, or cultural. Lorna Weir elaborates on Foucault’s concept of truth, arguing that while truth is historically situated, it is not a sequential, unilinear process: “the contemporary truth regime contains discourses formed at differing historical moments. Instead of superseding each other historically, discourses with irreducible truth formulae co-exist in the present” (2008:368). Weir acknowledges that Foucault’s understanding of truth regimes stemmed from a historical “archaeology” of knowledge, where he does not ask what truth is or should be, but that truth is a historical question to be analyzed in terms of its practices and effects by power structures (2008:376). While Weir understands Foucault’s truth regimes as both a product and enforcer of power, as “a society without power relations can only be an abstraction” (Foucault 1982:791), Weir argues that power is not an “intrinsic criterion of truth formulae; rather, truth formulae acquire the effects of power through their attachment to specific power apparatuses in a truth regime” (Weir 2008:368). Seumas Miller further argues that “discourse is objectively truth if the world says it is; conversely, it will be objectively false where the world is not as it says it is” (1990:119). In this quote, Miller challenges Foucault’s dependent relationship between truth and power by situating truth as a result of subjective and political circumstances: truth regimes do not simply mirror the reality of the real world or scientific absolutes because the world is experienced and understood in different ways and realities depending on the individual subject or society. Thus, while truth regimes are in a circular relationship with power structures to create and enforce certain narratives of truth, truth is also understood and embodied differently depending on the historical context, the individual subject and their relation to power.

New understandings of the construction of truth regimes focus on the aspect of how truth is presented and received by different subjects. The embodiment of truth returns to the role of power in enforcing specific truths, where truth relies on two different actors: the enunciator subject and the enunciated subject (Weir 2008:375). The enunciator subjects are those who produce “truth” in whatever form that exists, while the enunciated subject is the subject of the “truth” and their place in the broader world (Weir 2008:376). The “truth-tellers,” or enunciators, are not always those within power structures, as truth can be an embodied and subjective reality that could be both common knowledge and an individualized understanding of the world. It is a “creative and productive element” of human interactions to present different forms of knowledge as truth, revising and challenging specific (re)presentations of reality (Schneck 1987:27). Even though, for Foucault, truth is still deeply rooted in power structures through how a subject is presented with various forms of truth, as it is the “way that the subject experiences themselves in a game of truth where they relate to themselves,” or how truth is embodied and produces subjects by both power structures and acceptance of truths and non-truths (Foucault 1997:297). The representation of reality by a subject is the product of the presentation of certain truths, where even if certain truths regimes are seen as reality by a subject, it does not mean that this is seen as universal truth (Miller 1990:119), as the presentation of “truth” strongly relates to how it is embodied by individuals or societies as truth or non-truth (Weir 2008:384). Thus, the presentation of truth is how knowledge or discourses are made available to others, but it is the representation of these truths that create the subject or lived experience of such truths.

This research uses Foucault’s power structures and truth regimes as a foundation for analyzing the presence and effect of other regimes of truth in the contemporary world. Foucault’s understanding of truth primarily focuses on the immediate presentation of truth by power structures to propose a truth that is uniformly scientific and serves to primarily enhance power (Foucault 2000:131, cited in Weir 2008:368). Lorna Weir criticizes Foucault’s proposal of the circular/dependent relationship between power and truth because it does not adequately provide the space to determine other narratives and forms of truth that shape power or stem from individual subjects. Instead, Weir proposes alternative truth regime classifications that are “comprised of radically heterogenous truthful knowledges – veridical, mundane/common, symbolic, and governmental – that have distinct histories and relations to power” (2008:368). [[8]](#footnote-9) This research thus utilizes Weir’s four classifications of truth to analyze how different truth regimes impact individual/societal experiences and reflect varying power relations are more relevant for the analysis of the multilayered narratives of nuclear energy and the intricate discourses of the Belgian nuclear phaseout.

Veridical truth is a form that closely aligns with Foucault’s presentation of truth regimes, as this form of truth is “characterized by the absence of an enunciated subject whose temporal and spatial coordinates organize the account,” meaning that this form of truth is universal and not situated in historical events, circumstances, or how it is received by the subject (Schutz 1962:222). For example, the statement that “the earth is round” is a veridical truth in the contemporary world because it is objectively true without influence from power structures or alternative information (Miller 1990:119). Veridical truths are indisputable facts, whereas other forms of truth either stem from interpretations of veridiction or attempt to represent alternative facts as veridical truths.

Mundane truth, or common-sense knowledge, is seen as a socially constructed truth that may change with societal or individual values. This form of truth does not necessarily rely on or align with power structures because mundane truth is often situated in the morality of what is acceptable by others, and is distinctly separate from scientific or veridical truth (Weir 2008:378). The creation of mundane truths is separate from power structures because it is used to define common knowledge and protect the subject from false truths. As a result, mundane truth is a resource that can be used for or against governance/political powers to protect the subject from falsity and subjugation to certain discourses that are not reflective of the lived experiences and feelings of the subject (Weir 2008:384). For example, political discourses or media/press present events or information with certain biases or to push specific agendas, whereas mundane truths prevent the subjects from absorbing “lies circulated as truth” and instead encourages the subject to challenge discourses that do not reflect their lived experiences (Foucault 2001:15, as cited in Weir 2008:371). A subject’s freedom to speak freely does not mean that everything they say is truth, as their words are held accountable by the common knowledge of those within the same context or society to prevent the spread of lies and false information.

However, depending on the power and influence of the “truth-teller,” their words may be regarded as a symbolic truth, or a truth that is separate from absolute fact and instead relies solely on the representation of information. The representation of symbolic truth can manifest in speech, media, or actions, but, unlike mundane truth, the “truth teller” describes or discusses a truth that is not rooted in veridical or absolute data (Singer 2007:454). For example, the concept of religion and faith in a god is a symbolic truth because it is true to certain people and is manifested in “what is not present, making visible that which cannot be seen but which is thought to exist” (Weir 2008:377). Unlike mundane truths, symbolic truths may be aligned with power because it is rooted in the representation of truth through speech, discourse, or action, where symbolic truth either secures power structures (like governments) or its critique (Weir 2008:377). To present a truth as reality is a form of power that is rooted in interpretation, where symbolic truths apply new meanings or interpretations to veridical truths that are then embodied or accepted by subjects through power (Schneck 1987:31). This is not to say that symbolic truths compete with veridical truths, as the two may co-exist in popular discourse (the world is round vs. the world is flat) and represent different formations of truth, even if they are not accepted as mundane, common, or universal.

Governmental truth is thus a hybrid combination of veridical and symbolic truths, as powerholders or the enunciators interpret and present the veridical truth through biased lenses. The problem with governmental truth is that it is inherently unstable because symbolic truths may change with new presentations of knowledge or historical events that alter how a society or subject experiences the world (Weir 2008:377). Governmental truths attempt to present truth as veridical in order to produce subjects through the presentation of certain truths regardless of how these governmental truths manifest (Foucault 1982:778). In Foucault’s regimes of truth, he focuses on how power generates truth through the guise of scientific or systematic information. Weir further expands upon Foucault’s concept by arguing that governmental truth includes analyzing the variations in power dynamics, historical contexts, and the diverse ways that individuals embody truth (Weir 2008:385).In governmental truths, power also serves as a tool that shapes knowledge to produce subjects by constructing a particular version of reality (Schneck 1987:28). Since symbolic truths are not accepted by everyone, governmental truths are challenged and debated by the subjects, and are only accepted based on the effectiveness of power structures presenting truth and the subject’s embodiment of said truth.

It is through the multiplicity of truths and their representation in the world through subjects and power structures that the narratives about nuclear energy are defined, (re)presented, and embodied. Subjects may accept certain truths based on their knowledge of the topic and societal understandings of the mundane, but the embodiment of knowledge is inherently linked to power structures that exclude or emphasize certain institutions of knowledge production to enforce symbolic truths for control over the subject. Identifying the different regimes of truth expressed by my research participants will thus contribute to an analysis of the energopolitics of nuclear energy and how it is understood and embodied by individual subjects/societies.

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# Methodology

To explore the socio-cultural elaborations about nuclear energy, this study conducted fieldwork in the town of Doel to understand the meanings and values attributed to nuclear energy by both visitors and residents. The research project delves into how nuclear energy shapes the narratives of individuals in Doel, incorporating historical memories of nuclear accidents, the symbolism of Doel as an abandoned village with nuclear tensions, and the governmental policies of the Belgian nuclear phaseout. This section outlines the activities undertaken during the research, including 11 visits to Doel, which encompassed 58 informal conversations with visitors and residents, and one on-site, in-depth interview. It also involved consulting the websites and documents from Belgian pro- and anti-nuclear organizations like the Belgian Nuclear Forum (BNF), 100TWh, and the Belgian Nuclear Society (BNS), as well as the energy reports from (inter)national energy organizations like the International Energy Agency (IEA), Engie, the Elia Group, and the World Nuclear Association (WNA). Additionally, in-depth interviews were conducted with workers from Engie, an insider involved in designing an educational exhibition on nuclear waste management, and a Belgian citizen who actively contributes to the social media pages of 100TWh and the BNF.

Fieldwork in Doel poses significant challenges, as explained in the vignette at the beginning of the chapter “Doel: Abandoned Town and Site of Nuclear Tensions” depicting the town’s eerie and uncomfortable atmosphere due to being abandoned and situated near nuclear plants. Accessing the field itself proved to be a hurdle, with limited public transportation options and a blockade at the Doel city limits that required identification to enter to ensure “safety and tranquility” in the town (Beveren Verbindt 2023). This barrier discouraged some visitors, while others opted to park just outside the blockade and walk into town, about a ten-minute walk. Being an abandoned town, public transportation no longer frequently serves Doel due to the lack of demand. The only available bus from Sint Niklaas to Doel is the 31-line, with a single stop in Doel around 4:30pm on weekdays. However, during my weekday visits, I never saw the bus arrive.

During my fieldwork, conducted from July 2022 to July 2023, I made a total of eleven visits to Doel. The town’s remote location made it challenging to access, and I often had to rely on friends with cars or navigate complicated public transportation routes involving trains, buses, taxis, and even walking long distances. Each visit to Doel lasted around five hours, varying on the day’s activities, transportation options, and weather conditions. Most of my interactions were with visitors to Doel, as reaching out to active residents proved difficult due to the extensive research done on the town in the past, its proximity to the Port of Antwerp, and the unique characteristic of being an abandoned town and outdoor graffiti museum that attracts tourists. Even KU Leuven has conducted research in Doel by placing specially designed living containers in town to point out the “need for proper city maintenance by the government” and “show the tourists that a new future has dawned for the village”.[[9]](#footnote-10) Doel’s reputation as an abandoned town continues to attract tourists and researchers, lured by the opportunity to experience its desolate charm, view the graffiti-adorned walls, and explore its rich history.

Despite efforts by the municipality of Beveren and local organizations (such as Doel 2020[[10]](#footnote-11) or Koester Doel[[11]](#footnote-12)) to revitalize Doel and encourage more tourism, predicting the number of visitors on the days of my visits remained uncertain. Some days, I only saw a few people over several hours, while other days had more visitors, such as Armistice Day on November 11, 2022, when around 50 people visited. Engaging with visitors for interviews posed consistent challenges: (1) the informal atmosphere, number security cameras, and frequent police patrols made approaching people for interviews difficult, as most people tended to avoid interactions with others to minimize confrontation, even going so far as to change paths or take different streets after spotting another visitor; (2) finding English-speaking visitors in a predominantly Dutch-speaking location. While some responded positively to my “*Spreekt u Engels?”* icebreaker, others declined or walked away, leaving uncertainty about whether they genuinely did not know English or were simply avoiding conversation.

When participants agreed to an interview, the discussions were relatively short, semi-structured, and informal, averaging about 15 minutes in length (see Appendix B). I would first introduce myself and the research before asking questions about their reason for visiting Doel, their perceptions of the town, their feelings toward the nuclear reactors, and their thoughts on the future of energy in Belgium. Given Doel’s tense atmosphere, I conducted the interviews without asking for identifying information like names and only used recording devices sparingly, since the surveillance of security cameras and presence of police in the area already created an atmosphere of hypervigilance that I did not want to intensify. After the interview, I would wave when I saw the participants around town again or make small talk inside the Doel 5 Taverne, aiming to appear friendly and non-intrusive to reaffirm their choice to participate in an interview. In total, I conducted 58 informal interviews and one formal interview, with three participants being residents of the town that I managed to reach. Among the participants, 30 were men and 29 women, ranging in age from 16 to 63. While I do not analyze whether the ages corresponded to specific responses or narratives about nuclear energy, the breakdown of age-related opinions on nuclear energy have been explored by the Belgian Nuclear Forum.[[12]](#footnote-13)

Despite the substantial number of interviews conducted for doing fieldwork in an abandoned town, the data collected might be considered small for the requirements of an ethnographic research, given the sporadic visits to Doel and inability to follow up with the participants. To supplement these informal interviews, I conducted several in-depth, structured interviews with relevant informants, beginning with two workers from the Engie nuclear power plant in Doel. Each interview lasted about one hour over Zoom, and I had to send a formal list of questions ahead of time for approval from the employees’ supervisors (see Appendix C). Conducting interviews with the Engie workers offered a unique opportunity to gain insider insights into their perspectives on the politics surrounding the nuclear phaseout, and allowed me to delve into how the workers themselves (and their colleagues at the power plant) respond to the ongoing changes in nuclear energy policies. The discussions with the workers also helped alleviate some of my personal anxieties concerning the nuclear reactors because they provided valuable information on the meticulous maintenance practices and active involvement of various stakeholders dedicated to ensuring the safety of the reactors. Additionally, I conducted an in-depth interview with an individual with insider knowledge of education outreach related to nuclear technologies (see Appendix D), and an hour-long, formal phone call interview with an active information of the Facebook pages for 100TWh and the BNF (see Appendix E). Through these interviews, I obtained a more comprehensive understanding of the activism behind nuclear energy and its role within the broader social and institutional energy landscape in Belgium.

At the beginning of my fieldwork, I held an anti-nuclear opinion that was influenced by the discourse surrounding the word “nuclear” in America, where I often associated the term with destruction and the historical context of the Cold War. However, as I engaged with my interlocutors and delved deeper into the topic, my positionality as a researcher on nuclear energy underwent a shift to become more pro-nuclear. This change in perspective led me to actively engage in self-introspection throughout every stage of my research, as exploring the town of Doel and being near the nuclear power plant continuously prompted me to confront my anxieties about nuclear technology and rationalize my feelings toward it. Interestingly, I found that many of my participants shared similar concerns regarding the possibility of a nuclear meltdown, leading me to realize that my anxieties were not unique but shared.

Despite my prior anti-nuclear biases and current pro-nuclear opinion, I made a conscious effort to adopt a neutral and unbiased positionality while conducting interviews with my interlocutors in Doel. I believed that performing “neutrality” would allow me to gain a more comprehensive and multifaceted understanding of the nuclear phaseout in Belgium, as it was important for me to listen to and comprehend the various perspectives towards nuclear energy without letting my own biases as a researcher influence their opinions. However, maintaining the performance of neutrality during fieldwork proved to be an unexpected challenge: my interlocutors would often inquire about my own opinion on nuclear energy before providing their own, as if they were trying to gauge how their responses aligned with my perspective or if there was a “correct” way to discuss their feelings on the matter.

In addition to my fieldwork in Doel, I conducted supplementary research focused on the history of nuclear energy and the politics of the phaseout in Belgium, the roles of pro-nuclear organizations like the BNF and 100TWh, and (inter)national institutions that address energy and climate change to determine how these parties shape specific narratives about the phaseout. These investigations allowed me to contextualize and analyze the interviews from my interlocutors within the broader landscape of energy politics and the prevailing nuclear narratives in Belgium. By combining these various sources of data, I aim to present a comprehensive and nuanced picture of the nuclear phaseout and its impact on the community in Doel.

# Truth Regimes in Nuclear Energy

Guided by Dominic Boyer’s concept of energopolitics and Michel Foucault’s regimes of truth, this analysis delves into the complex layers and dynamics that shape the narratives of nuclear energy for participants in Doel. Within this chapter, I will introduce empirical data from my fieldwork and navigate the broader truth regimes that shape nuclear narratives. To achieve this, I will interpret my data considering Weir’s proposed truth regimes – veridical, mundane, symbolic, and governmental – that characterize narratives about nuclear energy and, more specifically, the nuclear phaseout (2008). An examination of how these truth regimes materialize among the discourses of research participants in Doel include the construction of nuclear narratives and justifications for the phaseout, which will reveal my interlocutors’ truth-making processes around nuclear energy and the power structures that influence their relationships with specific energy structures and aspirations for the future (Smith 2017:5). Moreover, I will also interpret and discuss the social, political, and cultural dimensions of nuclear energy in shaping and defining these narratives, thereby assessing their impact on my participants’ perspectives towards nuclear energy and other energy sources. By combining the concepts of the regimes of truth and energopolitics, this section establishes the groundwork for a comprehensive analysis of the intricate dynamics that encompass the narratives about nuclear energy within the context of Doel.

## Veridical Truths of Belgium’s Energy Supply

Within the regime of veridical truth, which remains largely unchallenged due to its scientific and absolute nature, my fieldwork and the prevailing context of the Belgian nuclear phaseout determined the presence of two almost-undisputed facts: (1) nuclear energy is a core source of energy generation and supply in Belgium; (2) the ongoing conflict in Ukraine has a discernible impact on the energy supply and caused energy crises across several European countries. As it regards nuclear energy supply in Belgium, the International Energy Agency calculated that nuclear energy contributed to 39% of Belgium’s energy in 2020 (2022:19); the World Nuclear Association attributed 50% of total energy to nuclear sources in 2021 (2023); and the Belgian Nuclear Forum, in collaboration with the Elia Group, cited that nuclear energy composed 42.5% of the electricity mix as of May 2023 (Elia Group 2023:65). These organizations, representing both global and domestic energy sectors, issue periodic assessments of energy generation, and evaluate the carbon footprint of different energy sources to gauge progress towards achieving climate objectives. The consensus between the IEA, World Nuclear Association, and the Belgian Nuclear Forum underscores the role of nuclear energy in guaranteeing “low-carbon electricity production month after month” (Belgian Nuclear Forum 2023) and its historical provision of “over half of Belgium’s electricity generation” (Birol 2022:111). Thus, the initial veridical truth posited here establishes nuclear energy as an integral aspect of Belgium’s energy matrix, as determined by the empirical, objective measures presented in these comprehensive reports.

The ongoing Ukrainian conflict triggered Belgium’s energy discourse and crisis. With the Council of the European Union imposing restrictions on oil and gas imports from Russia, the geopolitical turmoil echoes significantly in Belgium’s energy sector (Concilium Europa 2023). Although quantifying the exact impact of this oil and gas embargo on Belgium is difficult, the fact that Belgium’s oil and gas sectors rely solely on imports is enough to situate a correlation between the war and the escalating energy costs within Belgium (Belgium Nuclear Forum 2023). Therefore, in principle, the war in Ukraine could potentially disrupt Belgium’s energy transition plans with the nuclear phaseout, casting further uncertainty over the nation’s capacity to meet current energy demands.

The centrality of nuclear energy in the overall energy supply and the disruption provoked by the Ukrainian war can be considered as forms of veridical truths due to their almost-undisputed character and their representation as objective facts – nuclear energy’s enduring prominence in Belgium and the Ukrainian conflict’s geopolitical ramifications on oil and gas imports. These truths are supported by empirical, quantitative data supplemented by international institutions and energy organizations. However, while veridical truths are characterized by an objective, scientific, and absolute disposition, they do not inherently reflect how the truth is applied to or resonates within specific contexts (Weir 2008:370). How a culture or society acknowledges and embraces veridical truth is no longer an analysis of the veridical itself, but instead shifts towards the mundane or the intricate processes of subjectification that influence truth embodiment and acceptance (Miller 1990:117). In the ensuing section on mundane truths, I investigate the nuanced constructions of nuclear narratives through my interlocutors’ common knowledge and how power structures produce subjects through truth – veridical or otherwise.

## The Mundane Truths of Nuclear Energy

Mundane truth, synonymous with common knowledge, is not solely dependent on scientific data but instead evolves through societal norms that adapt and change in response to historical events, shifts in power structures, and general processes of daily existence. Within this framework, the enunciator – known as the “truth-teller” – achieves recognition in the realm of the mundane through collective consensus among individuals, societies, or nations. This fosters a sense of responsibility for truth-telling, emphasizing integrity and truth rather than falsehood (Weir 2008:375). Mundane truths also serve as an evaluative tool for the enunciated subject, whether it be an individual, an object, or an abstract concept, to effectively shape the standards and expectations for both the subject and the actors engaging with it. The dialogues and interviews conducted with my interlocutors in Doel aim to unearth their shared or mundane truths pertaining to their perceptions of nuclear energy and its role in the future.

To identify the various forms of mundane truths among my interlocutors, I first establish a comprehensive overview of their attitudes toward nuclear energy. Many of my participants in Doel admitted to feeling nervous about their proximity to the nuclear reactors, where their biases and recognition of nuclear energy’s threatening potential stem from historical incidents. References to Chernobyl or Fukushima arose among several participants when considering their proximity to the nuclear reactors, expressing mild unease due to past nuclear calamities; however, this sentiment did not hinder or prevent them from visiting Doel. In the ensuing section, I present three distinct perspectives: an anti-nuclear respondent, one who claims neutrality toward nuclear energy, and a pro-nuclear participant. These three positionalities represent the spectrum of attitudes toward nuclear energy as received from interviews and participant observation in Doel, thus illuminating their interpretations of the nuclear phaseout.

*Beyond the single restaurant in Doel, the only other operating business is the church of Our Lady Ascension, which hosts one service every Sunday morning for the few residents in the area. Surrounding the ancient church is a crumbling cemetery, with tombstones from the mid-1800s to the most recent date of 2003. Rows of bright white signs litter each grave, reminding families long gone to renew the rent for the dead’s plot of land for another fifty years. Rarely did visitors to the city enter the graveyard, though, marking the cemetery as another socially foreboding place in the tense shadow of the nuclear power plant.*

*Near the end of October, the chilly air coming off the water and crisp leaves made the town look and feel alive with the vibrant autumn colors, but the morbid transition of plants into their winter slumber reflected the sad fate of the equally dying town. As the cool sun began to set over the Scheldt and I waited for my ride to pick me up, I noticed someone sitting on a bench just outside the cemetery, writing in a small notebook. I casually strolled to her, waiting to make eye contact before offering my standard greeting: “Hey! Spreekt u Engels?”*

*The woman thought about her response for a moment, then nodded. “Yes, but only a little.”*

*Julia[[13]](#footnote-14) was visiting the town for the first time with her photographer husband, Arno, because it was his birthday and he had always wanted to visit Doel to take photos of the abandoned buildings. She was a little disappointed that the town was not as interesting as she expected, wanting more urban exploration into the buildings or graffiti art worthy of being labelled “art” as it is on the tourist website of Doel. We could see Arno**in the distance, weaving between the streets and taking photos through cracks in doors and of a single grey cat that strolled along a quiet sidewalk.*

*I asked Julia if the energy crisis had impacted her at all, but she shook her head before enthusiastically telling me about how they will have solar panels at their home in a few months. She told me that the electric bill has increased a little in recent months, but that the solar panels will alleviate that problem. Solar and wind were the types of energy to focus on, Julia explained, since Europe is already making changes to reducing fossil fuel use. Renewables were the future.*

*“But what about nuclear energy?” I inquired, gesturing to the power plants in the distance, the white concrete illuminated with the soft yellow glow of the sunset. “Does being so close to the power plants mean anything to you?”*

*“Just please don’t let this be the day,” Julia laughed nervously.*

*Her words would continue to echo in my mind with each proceeding visit to Doel, that we shared this slight anxiety and fear of a meltdown occuring at any moment.*

*“But they’re going to shut them down, did you know? So, I don’t mind them that much right now... Maybe it’s time we move away from that kind of energy,” Julia said, gesturing to the nuclear power plants. “It used to work in the past, but we have more efficient and safer ways now.”*

During our conversation, Julia’s perception of nuclear energy is one of danger, as represented in her phrase, “Just don’t let this be the day,” as well as the unsustainable and outdated technology of the nuclear reactors. Julia’s statements encapsulate her anti-nuclear sentiment because it is rooted in the acknowledgement of potential nuclear catastrophes based on historical incidents. When discussing the energy crisis, Julia advocated for renewable energy sources as the future of energy and a way to alleviate the crisis. She further contended that nuclear energy was no longer a relevant source of energy in the contemporary world – a technology that “used to work in the past,” but is now overshadowed by “more efficient and safer ways,” namely renewable sources. Julia enthusiastically outlined her intentions to install solar panels at her Brussels residence, underscoring the dual benefits of diminished electricity costs and Belgium’s climate objectives achieved through reduced dependence on fossil fuels.

Despite expressing apprehensions about the prospect of a nuclear meltdown during Julia’s visit to Doel, the assurance of an impending nuclear phaseout provided some solace for her anxieties, even though the reactors remain operational (Sovacool 2016:3).[[14]](#footnote-15) This phaseout offers a future untethered from the threat of nuclear meltdown: a way of disconnecting the future from the past “by putting such a future beyond the grasp of historical sensibility” (Chakrabarty 2009:197). Julia’s anti-nuclear stance, rooted in past historical events, intersects with the idea of a nuclear-free future and a reduced reliance on fossil fuel to inspire an optimistic hope for an eco-friendly energy future while assuaging her present-day nuclear anxieties.

It is essential to recognize that Julia’s anti-nuclear perspective is representative of most of my Doel participants. However, there are nuances in how other participants approached and perceived nuclear energy, as nearly sixty interviews reveal a spectrum of attitudes, rationales, and viewpoints towards nuclear energy, all of which underscore the intricate landscape of the sociocultural influences surrounding the narratives about nuclear energy in Doel. For example, one of the residents in Doel, Alexander, described his unique relationship with nuclear energy and the reactors:

*“We grew up in Doel, spent my entire life here, and I’ve never felt afraid of the reactors,” explains Alexander, as he stands beside his wife Tess. “I worked at the power plant for six months, working on water maintenance for the fuel, and that was the only time I’ve ever felt scared of nuclear.” The man looks behind me at the power plant peering over the tops of the Doel homes, the thick clouds of steam floating up to merge with the clouds. Tess just nods at his answer, not saying much because she claims her English is not very good. The moment of silence is quickly broken as Alexander claps his hands and exclaims, “But hey! They’re closing, eh?”*

While talking with Alexander, he explains that he’s “never felt afraid of the reactors” as a resident of Doel, positioning himself as neither pro- nor anti-nuclear. However, when he worked at the nuclear plant, he did feel scared sometimes, a feeling that could have been shaped by his relationship with the nonhuman nuclear reactor and his own opinions on nuclear energy (Foucault 1982:783). Even though he claims to not mind the reactors, Alexander still appears relieved that they are shutting down, which may reflect an underlying anti-nuclear attitude that also challenges the veridical truth that situates nuclear energy as a beneficial part of Belgium’s energy supply. Alexander and Tess both say things that negatively present nuclear as an energy source worth discontinuing, which shows their conflicting feelings regarding the safety of nuclear energy. Their thoughts towards nuclear are further influenced by the ongoing energy crisis, which has dramatically changed how they use energy because their bills have become so expensive. They’ve stopped using oil and gas and now heat their home with a fireplace and wooden stove. Even though they are frustrated with the energy crisis, they will not shift to renewable energy sources like solar panels:

*“They’re just too expensive and there’s no tax benefit to them anymore,” Alexander explains firmly, crossing his arms over his chest.*

*“And the wind turbines don’t seem to be effective either, they ruin the landscape.” Tess adds, gesturing across the Scheldt River where a handful of wind turbines line the coast between warehouse buildings and colorful shipping containers.*

*“If you can’t access solar panels, and you don’t like the wind turbines, then what does the future of Belgium’s energy supply look like?” I inquire, repositioning myself to stand beside them and face the nuclear towers peering over the tops of a row of trees.*

*Alexander rubs his chin, thinking, before he laughs. “I’m 63 [years old], I’m old. I haven’t thought about the future because I don’t expect to be in it.”*

Alexander’s humorous way of explaining why they are critical of renewable energy is more about how hard it is to change their energy habits and opinions than not caring about the future. Even though the couple was quick to transition to wood-burning fuel methods, which Laura Nader explains as the fear of implementing lifestyle changes and a reluctance to stray from familiar energy sources, despite various alternatives for energy sources (Nader 2010:26). Alexander and Tess’s focus remains on the present rather than the future because they seek relief from the energy crisis sooner rather than envisioning and undergoing the challenges of implementing and using a new source of energy.

Interestingly, it was challenging to find participants who identified as pro-nuclear. This scarcity is not merely related to their knowledge about nuclear energy, but also what they understand about the energy problem and how the government is handling the nuclear phaseout.

*On a rainy Saturday in February, during my visit to Doel, I had the opportunity to interview a middle-aged couple from Bruges, Anna and Lars. The small number of visitors present during my trip made them stand out as interview subjects. While I directed questions to both participants, Anna responded more hesitantly, attributing it to her perception of her limited English proficiency and her lack of knowledge about nuclear energy. In contrast, Lars displayed an awareness about the nuclear phaseout policy that I did not often see during my interviews, which he explained was due to his academic background in the study of Belgian politics at university.*

*“I think Fukushima is probably the thing people think about when they think of nuclear… I’m not sure why the phaseouts are happening. Nuclear energy plays a huge role in the future of energy and an immediate impact in reducing our carbon footprint now, but I think people’s attitudes towards nuclear impact how they want it and that just gives it a bad reputation,” Lars explained, looking Anna for her insights but she just nodded her head.*

*“What do you think the future of energy looks like in Belgium? What kinds of energy sources?” I asked, looking to Anna to see if she would answer the question, then to Lars.*

*“I think that energy in the future is not really in Belgium,” Lars answered. “The country is too small for wind, and no one is asking for wind turbines in their gardens… but no one is also asking for nuclear reactors either. I think that renewables are based on the people, because they have a say in if they hate when a new turbine is planted, or if they grow to love it over time. But they will also separate themselves from Belgian politics, that we pay our taxes and hope for the best, but Belgium is so hesitant to do anything that it makes it feel like a weird game they play that is separate from us.”*

*“So, because people are also not asking for nuclear reactors in their gardens, just like wind turbines, does that mean nuclear doesn’t play a role in the future?” I continue as we move to the side of the street under an overhanging metal canopy, just as the rain transitioned from a light mist to a quick downpour.*

*“I can see how nuclear is fine for the present because we need energy, but that no further reactors should be built.” Lars explained.*

Lars starts by acknowledging how many “Belgians” [[15]](#footnote-16) might fear nuclear energy because of events like Fukushima, but he personally does not consider himself scared of it, though, because he sees some good sides to nuclear energy. However, as he discusses the future of energy, Lars’ answers reflect a sort of ambivalence towards nuclear because he says that “nuclear is fine for the present because we need energy,” but he also simultaneously opposes building more reactors because he is not sure if nuclear is the best source of energy in the long run. His uncertainty gets more complicated when he talks about the nuclear phaseout, which has been underway for over twenty years and the plan has changed twice to keep some of the reactors running longer. The current plan is a partial shutdown of the reactors in 2025, but Lars believes that might not happen.

The responses of participants like Julia, Alexander, and Lars can be considered as different forms of mundane truth that identifies nuclear energy as dangerous and risky because of past nuclear accidents and disasters. Julia’s worried about a surprise nuclear disaster during her visit, Alexander is indeed scared of the nuclear reactors in specific circumstances, and Lars has ambivalent insights about nuclear energy: the range of opinions and responses shows how complex and different my participants’ views are about the Doel nuclear power plant and nuclear energy in general. Furthermore, the town of Doel is a symbolic site of the nuclear tensions and contradictions presented by the responses of my interlocutors through the “commonalities of shared behavior” towards the nuclear reactors among everyone who visits Doel (Adams 1975:58). The mundane truth is based on an important component of fear for nuclear energy which is socially accepted and recognized, stemming from past events, which influences their current reflections on nuclear energy.

When discussing the future of nuclear energy, both Julia and Lars share the opinion that it may not play a significant role. For Julia, this alleviates some anxieties about being close to the nuclear reactors. Meanwhile, Alexander enthusiastically comments, “But they’re closing, eh?” referring to the reactors shutting down soon. Their fears and anxieties about nuclear energy are momentarily relieved as they envision a nuclear-free future, creating a temporal disconnection where the history of nuclear affects how they perceive it now, while the idea of a nuclear-free future brings relief from current anxieties (Schutz 1962:222). The mundane truth of nuclear energy in Doel is thus intertwined with fear and danger, driven by past experiences and uncertainties about the future.

The narratives and attitudes towards nuclear energy in Doel are multifaceted and influenced by various factors, including proximity to the reactors, personal experiences with nuclear energy or the power plants, the ongoing energy crisis, and political complexities of the phaseout. At a mundane level, nuclear energy is commonly understood as dangerous and a potential threat because of the past, but in the future, nuclear energy is no longer seen as a threat. In the present, however, this truth leads to the conflicting attitudes of my interlocutors feeling uncertain about nuclear energy, but their anxieties are removed because of this imagined future even though the threat of nuclear disaster remains.

## Symbolic Truths of the Nuclear Phaseout

Mundane truths are situated in a shared, common knowledge of certain topics which then influence individual, subjective experiences. When considering how my Doel interlocutors perceive nuclear energy as unsafe and obsolete, it is important to question whether this understanding stems from mundane truth or if it aligns with scientific data. Symbolic truths are often presented as scientific, even though it is not always backed by scientific or absolute facts. This does not necessarily mean that “symbolic” truths are symbolisms for broader concepts, but, as Weir describes, is information being presented as absolute fact when it does not have the data to support the claim as absolute (2008:377). While my interlocutors’ mundane truth stems from historical nuclear disasters, this section explores the narratives presented by my interlocutors, (inter)national institutional policies like the Paris Agreement and Kyoto Protocols, and pro-nuclear energy insiders to explore the debate of whether nuclear energy is sustainable and how different sources of information shape my interlocutors’ attitudes towards nuclear energy and the phaseout. I first explore the narrative of “nuclear is unsustainable” by providing an overview of my interlocutors’ familiarity and rationale for why the phaseout is happening (based on information from the previous section), as symbolically compared to their association of the town of Doel with the consequences of nuclear energy, a favoritism for renewable energy sources, and how climate change initiatives influence their ideas for the future of energy in Belgium. Then, I explore the interviews of two participants with histories in pro-nuclear activism and insider’s knowledge into the specifics of both nuclear energy technologies and the phaseout to show the alternative narrative of “nuclear is sustainable.”

Renewable energy sources like wind and solar accounted for a mere 3% of Belgium’s carbon emissions in 2022, while nuclear contributed about 6% from its total energy generation (Birol 2022:39). These figures, though modest, are substantially lower than the carbon emissions produced by oil (46.4%) and natural gas (39.6%) (Birol 2022:38). While nuclear may not be as clean as renewables, it still outperforms fossil fuels. Sovacool’s research on energy justice advocates for an anti-nuclear, pro-renewable transition, branding nuclear as a burden to future generations due to the copious, non-reprocessable nuclear waste (2016:3). Beyond the intricacies of nuclear waste management and its long-term radioactive damage, my interlocutors harbor an ongoing dread of nuclear meltdowns, now and in the future. The mundane elements in their narratives are based on a collective bias that categorizes different energy sources as “good” or “bad” based on perceived sustainability and safety (Smith 2017:5). The discourse around the nuclear phaseout thus centers on its sustainability, since nuclear offers immediate energy but harbors long-term issues that shape my interlocutors’ narratives. Even if nuclear scientists or pro-nuclear groups like the BNF attempt to equate nuclear to renewables, their scientific approach clashes with my interlocutors’ everyday experiences because their assertion that nuclear is not a safe energy source renders discussions of its technical sustainability irrelevant, as they prioritize alternative renewable sources over nuclear ones.

My interlocutors weave their nuclear narratives into their lived realities, as evident in Julia, Lars, and Anna’s descriptions of Doel being disappointing or lackluster, which is partly attributed to the town’s “bad reputation” and their negative association between nuclear energy and negative or destructive consequences (as expressed in the “Mundane Truths of Nuclear Energy” section above). It is noteworthy that Julia’s assertion of nuclear energy’s danger and peril is rooted in a shared social narrative of its unsafe nature, as seen in her personal reflections on her relationship with nuclear energy and a shared social narrative among my interlocutors. In contrast, the notion of nuclear energy’s obsolescence and inefficiency is debated because of scientific evidence by the IEA or Elia Group that advocate for the prevalence of nuclear energy in Belgium’s energy production.

The notion that Doel has a “bad reputation” due to the nuclear power plants highlights a correlation my interlocutors draw between nuclear reactors and destruction or abandonment. Their experiences in Doel epitomize how mundane knowledges manifest in my interlocutors’ interaction with the town and the concept of nuclear energy that encompass the “conjunction of value and meaning with a particular type of energy form that constitutes culture” and “influences how the individual relates these perceptions to his relations with other human beings and things” (Adams 1975:144). The participants’ previously defined mundane knowledge shapes their experiences in Doel. where nuclear energy is commonly seen as uncertain and dangerous.

The tendency to favor renewable energy sources over nuclear becomes evident as my interlocutors emphasize the acquisition of solar panels for their homes. While not all my interlocutors owned solar panels, they shared a prevailing sentiment that renewable energy shapes the energy landscapes of the future. Even when some of my participants complained about the aesthetics or economic aspects of renewables, such as Alexander and Tess critiquing wind turbines as an eyesore that ruins the landscape, or the expensive cost of installing solar panels, or even resorting to the use of wood stoves to heat their home, these sources were still favored over nuclear energy. My interlocutors see renewable energy as the crux of Belgium’s energy future, particularly in the context of the nuclear phaseout, associating solar and wind power with sustainability and environmental wellbeing. In Julia’s account, as mentioned in the vignette from the previous section, she emphasizes how “solar and wind are the types of energy to focus on, since Europe is already making changes to reduce fossil fuel use.” The climate goals and initiatives by and between nations, such as the Paris Agreement or Kyoto Protocols, aim to curtail global warming and drive eco-conscious shifts in societal practices and policies, which also influence my interlocutors’ visions of the future, as reflected in their commitment to sustainable living, like the installation of solar panels and energy-saving habits.

An alternative perspective to the ongoing debate between nuclear and renewable energy lies in the proposition that these two sources should work together rather than in competition, as each one contributes to achieving climate goals because of their limited carbons emissions. This alternative perspective is expressed by two of my research participants who, unlike most of Doel’s visitors, possess inside insights regarding nuclear energy and its phaseout: Thomas, an active participant in the online communities of 100TWh and the Belgian Nuclear Society, and Ruben, an electromechanical engineer stationed at the Engie nuclear power plant in Doel. Both respondents argue that the current anti-nuclear attitudes stem from a lack of understanding about the specifics of nuclear energy and that the current energy discourse prioritizes specific sources of energy while stigmatizing nuclear energy in the same way as fossil fuels. Even though my interlocutors often held an “either or” attitude towards nuclear – positioning nuclear versus renewables, or categorizing nuclear as good or bad – Thomas and Ruben seek to foster an alternative viewpoint that advocates for both renewable and nuclear energies. Based on their insight, it is possible to identify distinct symbolic sets of representations between my Doel interlocutors and that of Thomas and Ruben to reveal two different, competing narratives about the reasons behind the nuclear phaseout.

Thomas, an advocate for nuclear energy and active member of 100TWh and the BNS, expresses perspectives influenced by the biases inherent to these organizations and the research they produce to promote pro-nuclear and anti-phaseout narratives. I first contacted Thomas for an interview after noticing the reoccurring appearance of his name in my social media alerts related to nuclear discussions and news in Belgium. Upon his enthusiastic agreement for an interview, we discussed his personal experiences with nuclear energy, both as an advocate and as someone who grew up within the vicinity of nuclear radiation/meltdown and even having a view of the reactor towers from his residence. Importantly, Thomas provided valuable perspectives on how the prevailing energy crisis interconnects with the nuclear phaseout and influences public perceptions of nuclear energy.

***Alena:*** *So how does Doel make you feel regarding the way it is now?*

***Thomas:*** *Yeah, it's like the victim of bureaucracy, I guess. The government wants to do something, they buy up these people's houses, and people wanted to live there for the rest of their lives and now they have to move, so uh. Lots of uh, friends moving away from each other, social circles gone, and in the end, it was all for nothing because they changed their minds. Now the town is just there.*

***Alena:*** *On a similar but different note, currently Belgium/Europe is going through an energy crisis, has that impacted you?*

***Thomas:*** *Uh yes, power prices went through the roof. I think we're paying three times more than the year before. And that's just, uh, terrible. And that's all because the word nuclear energy already had this bad connotation, bad reputation, that it was bad for the environment and it was up to the Green parties, and a lot of people got false information and people have been actively trying to close down the new power plants to get a favorable view from the people so to speak. If more people are against nuclear power, then more politicians are also against it so more people vote for them. And closing down the new plants instead of building new ones is a big part of why the energy crisis happened. We should have had five or six plants by now, so we should have had new ones. The ones we use now are from the sixties or seventies… sixties. So that's uh, yeah, that's getting old. The concrete is starting to show cracks and you see one of the reactors is now closed, uh, for repairs because it's too old and we should have taken the time, use the time while it was operational to build new ones rather than resting on our laurels because we had two little power plants. Yeah, and the alternative is more polluting. They're starting up charcoal centrals, gas burning plants to generate energy, so if you're trying to shut down zero-waste nuclear plants for charcoal fire plants, like what are you doing?*

Thomas’s insights reveal two key topics for analysis: the relationship between personal experiences on nuclear perceptions, and a criticism of the actions of the Belgian government. Thomas’s characterization of nuclear energy having a “bad reputation” aligns with my interlocutor’s opinion that Doel’s “bad reputation” is caused by the presence of the nuclear plants. My interlocutors associate nuclear energy with danger and as a possible leading factor in Doel’s abandonment, which my participants do not want to see reproduced in other towns and is a correlation that frustrates Thomas.

Thomas further contends that political actors tailor their policies to reflect public sentiment, asserting that “the more people against nuclear power, the more politicians are also against it so more people vote.” The social memory of the history of nuclear energy and governmental policies influence each other (Adams 1975: 312), as seen through how the Belgian government and policymakers utilize and enforce anti-nuclear narratives to argue that the phaseout is the best option for Belgium’s energy future, even as they simultaneously construct gas-fired power plants and manage the complexities of the energy crisis (Engie 2020). Thomas highlights the government’s paradoxical narratives by acknowledging their contradictory actions in constructing gas-fired power plants, which Thomas perceives as a downgrade compared to “zero-waste nuclear power plants.” According to Thomas, the government rationalizes the (re)establishment of fossil fuel energy sources in Belgium to compensate for the loss of energy caused by the nuclear phaseout.

Thomas’ interview provides insight into the perspective of a pro-nuclear activist and how he perceives the intricate relationship between government actions and the shared public attitudes toward nuclear energy. To further define the types of symbolic truths represented by and inherent to the phaseout, I conducted an interview with Ruben, an electromechanical engineer at the Engie nuclear power plant. Our interview focused on his perspective concerning the consequences or impacts of the nuclear phaseout and the role of nuclear energy within the Belgium’s energy landscape. Throughout our comprehensive 90-minute discussion, Ruben consistently expressed his frustrations regarding the public’s lack of awareness about the specifics of the nuclear phaseout:

***Alena:*** *One of the things that I have seen in my research in talking to people in Doel is that people feel relatively divided on how they feel about nuclear energy. Some are afraid, some are not, but most of the people I’ve talked to think that we, as a society, are beyond nuclear energy, that nuclear energy does not have a future in Belgian energy, and I’m curious what you think about that kind of statement and why people might feel that way?*

***Ruben:*** *Well, the thing is that renewables have been heavily advocated, and rightfully so, and people having panels on their roofs, windmills are being built everywhere, which is all a good thing, but it really skews the public's idea of what renewables can do. A lot of people don't realize that when the wind isn't blowing and the sun isn't shining, that industry has to stop if that's all you're counting on. And, well, I'm trying not to sound snobby, like the engineer that knows everything, but people don't really realize what it takes to build that much energy production capacity… It's part of the problem. Um. I think that is because people have, uh, accepted the idea that nuclear isn't "of these days anymore" and are trying to fill in the gaps of knowledge with whatever fairytale they think pleases them. I'm trying not to sound anti-renewables, I am not, just that they are currently being advocated as our main opposition when we should be working together instead. A lot of people… they have been scared by nuclear, and the nuclear sector isn't that fantastic when it comes to communication about our past, and that's not just a Belgian thing but an international nuclear sector thing. So, they have not been able to dispel those myths when it comes to nuclear. Which, in turn, kind of makes the entire thing.*

Ruben’s response offers insight into the origins of my interlocutors’ apprehension surrounding nuclear energy, attributing it to a lack of comprehensive understanding and a tendency to embrace comforting, hopeful narratives about energy and the future, or what he refers to as “whatever fairytale they think pleases them.” This “fairytale” notion often revolves around the portrayal of renewable energy as the ideal source of energy and nuclear as the opposite – a comparison that mirrors the negative association attached to fossil fuels due to their damaging impact on the environment. The dichotomous mindset, evident in the discourse of my interlocutors as mentioned earlier, tends to polarize energy generation into a simplistic “either/or” paradigm. Ruben, however, suggests a more nuanced approach, advocating that nuclear and renewable energy “should be working together” to meet Belgium’s energy demands. His assertion highlights the necessity to combine energy sources, especially during the current energy crisis and the present limitations of solar and wind infrastructures in Belgium to produce a fraction of Belgium’s energy needs.

Nevertheless, anti-nuclear narratives cannot solely be attributed to a lack of knowledge about the topic, as even Ruben emphasizes that “the nuclear sector isn’t that fantastic when it comes to communication about our past.” This lack of knowledge extends beyond a mere social critique of individuals not learning about the topic, but it is an institutional inadequacy that restricts public access to comprehensive insights into nuclear energy. The resulting information gap amplifies anti-nuclear sentiments, thus reinforcing the very “fairytales” that shape public perception.

The responses from my interlocutors determine that the reasons for the nuclear phaseout, the symbolic truth, is situated in their perceptions that nuclear technology is outdated, unsustainable, and complicit in Doel’s abandonment. While the descriptor of the nuclear towers as “outdated” aligns with objective facts about the reactors nearing the end of their operational lifespan, the broader symbolic realm stems from a complex interplay of experiences and preconceptions (Sintubin 2022). Despite scientific research endorsing nuclear energy’s compatibility with renewables or its comparative sustainability to fossil fuels (International Energy Agency 2022:40), my interlocutors’ stance converges on a symbolic truth grounded in their previous experiences with nuclear energy. This fusion of disappointment, bolstered by the mundane elaboration of nuclear as a danger, supersedes alternate data and perspectives, which emphasizes the power of symbols in shaping the viewpoints and narratives of my interlocutors.

The complexity of the interplay between symbolic truths becomes evident when contrasting the perspectives of Doel’s visitors and pro-nuclear insiders like Ruben. The divergence in the influence of different truth regimes shows how different power structures shape and define specific truth narratives and lived experiences of the subjects. The power dynamics inherent in shaping these truths become apparent through the actions and attitudes of my Doel participants, where their opinions reflect the information presented by influential international institutions, such as the Paris Agreement or Kyoto Protocols, to advocate for sustainable and environmentally friendly lifestyles that inevitably mold their energy outlook (United Nations 2020). Conversely, pro-nuclear organizations like the BNS or 100TWh wield less influence, struggling to alter the general public’s anti-nuclear positions. Even on those instances where my interlocutors display neutral or ambivalent attitudes about the importance of nuclear energy in Belgium’s energy supply, they still argued that nuclear is still dangerous and not sustainable, thus reflecting a clash between these divergent truths. The symbolic truth attributing the nuclear phaseout to its unsustainability and irrelevance in the future persists due to the truth’s resistance to change in the face of alternative data.

In summary, the symbolic truths embraced by my interlocutors focus on nuclear energy as environmentally detrimental and unsustainable. This symbolic truth is influenced by their mundane knowledge and a predisposition to understand renewable energy sources as the epitome of energy while vilifying nuclear energy. Individuals like Thomas and Ruben present an alternative discourse based on scientific facts that prioritizes that Belgium’s energy future depends on the coexistence of nuclear and renewable energy to produce a stable, consistent, and cost-effective energy supply.

Given that the nuclear phaseout is a policy enacted by the Belgian government, it becomes imperative to contextualize my interlocutors’ nuclear narratives within their familiarity with the phaseout. The governmental narratives, or truths, framing the nuclear phaseout are also intertwined with the symbolic truths of my interlocutors. This interplay of symbolic truths, whether rooted in personal perspectives, institutional narratives, or overarching policy decisions, exemplifies the multifaceted dynamics of energopolitics. As the energy landscape continues to evolve, these symbolic truths will undoubtedly shape and reshape the discourse surrounding nuclear energy, exerting their influence on the power structures that govern the phaseout’s implementation.

## Governmental Truths about Nuclear Energy and the Phaseout

Upon analyzing the nuclear narratives established by the Doel interlocutors regarding the categories of veridical, mundane, and symbolic truth, the subsequent analytical stride involves delving into the truth narratives propagated by the government. Lorna Weir aptly depicts governmental truth as a “hybridization of both veridical and symbolic truth because theoretical knowledge such as economics and psychiatry are incorporated into governance” (2008:377). Governmental truths reveal insights into how the sociocultural representations of energy influence the transition away from nuclear energy, but also illuminate how my Doel interlocutors internalize and engage with the governmental truths. Identifying governmental truths becomes an exploration of the intricate relationship between the public and political spheres, as well as comparing the visions of both in achieving a “desirable future” for energy and climate goals within Belgium (Smith 2017:5). Thus, government narratives regarding the nuclear phaseout are rooted in the power structures dictating the execution of the phaseout and the collaboration of political pursuits and the subjects governed by the phaseout’s policies.

According to my analysis, the established veridical truths include (1) nuclear energy as a core component of Belgium’s energy generation and supply, and (2) the Ukrainian conflict has resulted in a ripple effect on energy supplies and crises across several European nations. In contrast, the mundane and symbolic truths, as articulated by my interlocutors, includes the perception that the nuclear phaseout hinges on outdated and non-sustainable nuclear energy technologies. An immediate contradiction surfaces between the veridical and symbolic truths of my interlocutors: nuclear energy emerges as a core component of Belgium’s energy fabric, yet is simultaneously labelled as obsolete and unclean by my interlocutors, thereby legitimizing their rationale behind the phaseout.

The phaseout is generally approached from a top-down perspective, where specific narratives concerning nuclear energy are incorporated into broader political agendas. This disjuncture manifests in the disconnect between the public’s rationale regarding the phaseout and the actions of the Belgian government. Notably, despite phaseout’s initiation in 2003, it has consistently been cast as an inevitable policy by the Green Political Party even after “18 years, 10 different governments, and six energy ministers… the choice is a no-brainer” (World Nuclear News 2021; Moens 2021). The implementation of the phaseout, however, is complicated by ongoing debates concerning *how* and *when* the reactors will be shut down, which exemplifies a political maneuver that “exercises control over valued things” through power to mold the subjective experiences and narratives of my interlocutors by not providing any alternative narrative to the phaseout other than its complete shutdown (Adams 1975:19). The frequent revisions to the policy that include extending or shortening the life spans of the reactors to accommodate energy needs deviate from the original plans of the phaseout, reflecting the hesitancy and inconsistent attitudes of political powers to completely transition away from nuclear energy.

Regardless of the sociopolitical dynamics of the nuclear phaseout, a discussion on why the phaseout debate has continued over the years reveals part of the contradictory attitudes of Belgian political powers towards nuclear energy. While the Green Political Party advocates for the phaseout because the nuclear energy is unsustainable and environmentally unviable (Moens 2021), the persisting return to, and modification of, the policy raises several questions: if nuclear energy is deemed inherently unstable and unsustainable, what prompts policymakers and politicians to continuously revisit and revise the policy? If nuclear energy is not seen as a semi-stable and reliable energy source, why continue to extend the operating lives of the reactors rather than following through with the transition into other energy infrastructures? While several factors contribute to changes in the energopolitics of the phaseout within sociopolitical contexts – such as the war in Ukraine or the energy transitions undergone by other countries – Belgium’s nuclear phaseout continues to prolong the nuclear debate and deferring investment in renewable energy infrastructure in favor of gas-fired power, which is representative of its inconsistent and contradictory stance towards nuclear energy.

The interplay between the Green Party’s ability to present specific narratives to influence the public while remaining susceptible to the opinions of that same public necessitates further investigation. By following the governmental truth formula that combines veridical and symbolic truths, the Belgian government and energy policymakers actively aim to present nuclear narratives as veridical by portraying them as immediate and tangible realities (Weir 2008:376). Despite spanning a two-decade discourse, the nuclear phaseout policy is perceived by my interlocutors as not merely an inevitable course but as already complete. This perception emerges from the Green Party’s energy politics wherein anti-nuclear narratives are presented through “false information and… actively trying to close down the new power plants to get a favorable view from the people,” as presented by Thomas. However, the perspective that blames the entirety of the phaseout narrative to the Green Party’s (or the broader Belgian government, as expressed by other interlocutors) anti-nuclear stance does not allow for a fully accurate understanding of the impact of the nuclear phaseout. Even though the government significantly influences the symbolic representations of my interlocutors, which attribute the nuclear phaseout to nuclear energy’s outdated technology and unsustainability, where the latter are also influenced by other institutional sources. Therefore, my interlocutors are influenced by governmental discourses on different scales, both national and supranational, such as the Paris Agreement, to prioritize renewable energy sources.

However, despite the inconsistency between governmental discourse and the actual implementation of its policy to “use knowledge and power to control the relations between persons and things” (Weir 2008:380), where the “things” in this case is the nuclear phaseout policy. To understand what governmental narratives presented requires further analysis into how my interlocutors perceive and engage with the nuclear phaseout through their interactions with the Belgian government and its energy policies. A conversation with Femke, a participant in Doel with past experience in politics and communication, and an interview with Nicholas, who contributed to the formulation of an educational tour on nuclear waste management, reveal how the phaseout’s implementation and the government’s narratives about the phaseout influence their own nuclear attitudes.

In June of 2023, I made plans to go to Doel for one final visit, marking the intended conclusion to my fieldwork. However, the week preceding my visit, the Doel 5 Taverne shut down (Houck 2023), leaving little else to do in Doel besides walk the simple three blocks that made up the village. Despite the rainy and dreary weather, my reliance on receiving rides from friends with cars required that I follow through with my plans to visit Doel rather than rescheduling for the indeterminate future, and I braved the rain for several hours during this last visit. Throughout this last year, the unassuming boathouse along the docks, *De Spuikom*, was never open and rarely saw vehicles in the parking lot outside, so I had assumed that the building was just as empty and alone as the town and the sailboats docked in the muddy water nearby. However, during my visit in the rain, I noticed that the front door was open, and two cars were parked outside. A sign above the door read “*Enkel voor leden*,” members only, but I went inside anyways to escape the rain. Another woman sat at a table inside with a half-empty rum and coke and a reading tablet in front of her, and I spent the next hour talking to her about her impressions of Doel and her opinions on nuclear energy. Femke, as it turned out, was only visiting Doel and arrived just before the rain began and noticed the owner opening the boathouse and decided to seek refuge inside until the rain passed.

*“Have you heard anything about the nuclear phaseout?” I ask, after discussing how Femke found Doel to be sad because of the graffiti and boarded up houses.*

*“I’ve heard a lot about it, but also nothing at the same time.” Femke shrugs and sips on her beer. “People talk about it politically, or that it’s unsustainable. I don’t know if it’s sustainable or not, but I don’t know a lot about it, just that it is unsustainable because of the waste.”*

*“Do you feel like you have the opportunity, or maybe resources, to learn about nuclear? Or how come you don’t feel like you know a lot about it?”*

*Femke shrugs again. “To learn about it is a hassle, to get beyond the soundbites and narratives of politicians, but I don’t have the time, or to find an expert. But ‘experts’ can be biased, and their statistics are twisted. I would need to learn from someone trustworthy, who is there to inform you and not use it for their own benefit. We see the impact [of the phaseout], but I have no time, energy, or the resources to change or address it.”*

*“How do you determine who is trustworthy?”*

*“Maybe their credentials, they’re not suggestive speaking, sensitive to suggestive language… I would need to learn from someone I find trustworthy, because I question policy and the media. There are four ministers of energy in Belgium, but I don’t know anything about who they are, only the drama… I also think politicians will say anything to get re-elected, that I am only an important stakeholder to them as a vote but as an informed citizen. I need to hear alternatives.”*

My conversation with Femke unveiled a pivotal insight into my research, one that I had previously not considered: it became apparent that my informants’ lack of awareness regarding nuclear energy and the phaseout might not solely step from a lack of accessible resources as a result of the anti-nuclear energopolitics in Belgium, but also from their broader skepticism concerning who and how information is presented. In the contemporary world of interconnected technology, so much information is shared that individuals are often overwhelmed with attempting to understand and digest everything presented to them. As Femke later explains, “there’s an information overload on the different generations, where if something doesn’t directly pertain to someone, then it’s not reflected on.” This sentiment is reflected in my other interlocutors’ responses to the phaseout: for instance, Alexander and Tess admitted to not knowing why the phaseout was happening, only that it was in progress and that their electricity bills were increasing as a result. Alternatively, Ruben criticized people for not knowing about nuclear energy and for only following one specific narrative that situated nuclear as dangerous and outdated. The lack of an in-depth understanding or reflection regarding the nuances of nuclear energy beyond the realms of symbolic and mundane truths among my interlocutors is not solely an outcome of the limited opportunities to learn about the subject, but rather a focus on the immediate present and a scarcity of “time, energy, or resources” for effecting change.

Nicholas, who previously assisted in developing an educational tour as part of an initiative to inform the Belgian public about nuclear waste management in areas like Dessel and Mol, offers his thoughts into how truths are shaped and presented. Even though he is not a scientist or engineer by trade, his expertise in designing and implementing a communicative strategy is relevant for exploring how nuclear topics are effectively presented to people who are unfamiliar with the specifics of nuclear energy but are well-acquainted with their own mundane and narratives about nuclear.

***Alena:*** *I know you haven’t worked there for a few years, but I was wondering if you knew about how the program reaches out to the community beyond the exhibit? Or if you knew the effect that it has had on how people have perceived nuclear waste as a result of having access to this education.*

***Nicholas:*** *Ah, I don’t know that, but what I do know is that uh, in this region, especially the generation of, um, little bit older people like 50, 60, 70 years, they’re very, very aware of the problematic in the region. And they’re also very actively involved in the whole project. [The project] is actually a co-creation of several institutions with the people, so they really had a say in everything you see there. How the building looks like, what is shown, what is stored there, what was shown there. Everything, everything, everything, they’re involved in. So that’s the whole idea.*

***Alena:*** *I think that was something that I thought was really interesting with the exhibits, seeing this emphasis of the community in general and that the tour really emphasized that you as an individual can also think about and have more of a say in nuclear energy, encouraging people to have more of a say. You know, in my fieldwork in Doel, lots of people emphasize that they don’t have any knowledge of nuclear energy, which is fine. I don’t either. But that a lot of them talked about how knowledge and education would, you know, would change people’s ideas.*

***Nicholas:*** *It’s just that they don’t learn, they didn’t, you know, they don’t have the time. There’s no resources. It’s kind of a complicated subject to look at. But to make this more personal and consumable. It lowered the threshold to have, to create your own opinion. Maybe because people think: “What do I know about this? I shouldn’t really have an opinion on it.” When you feel that you’re not an expert, why should your opinion matter? But as a Belgian citizen, everyone should have a say in this.*

***Alena:*** *And so, this kind of, um, I don’t want to say inconsistency, that’s not the word I’m looking for, but indecisiveness, um, of politics. I hear that that’s a common thing in Belgian politics just because of how chaotic it all is.*

***Nicholas:*** *Yes, it’s, that’s true. It’s standard. There should be more reform. Like our pensions, yesterday, or the day before yesterday, they, uh, sorted it out or, but it’s not a big reform. It’s Belgium. It’s always incremental changes, uh, and so it benches different dossiers and its, it’s the way in which politics are organized in our country with the different regions and different political parties. But of course, it’s a conflict on every single thing, and nothing happens, nothing happens. It just isn’t easy. There are no easy solutions, fair, uh but yeah, let’s see.*

Nicholas describes a comprehensive overview of the multiple practicalities involved in the construction of nuclear narratives through the lens of energopolitics, which significantly impact the way individuals shape their opinion about the nuclear phaseout. A prime example resides in Nicholas’ description of how the Belgian political system is slow and “nothing happens” when implementing change, mirroring the current reality of the postponement of the nuclear phaseout. However, Nicholas attempts to bridge the gap between the lived experiences of the Belgian population and the overarching policy of the phaseout by highlighting the positive influence of the educational initiative on nuclear waste management. Notably, he emphasizes how the educational tour he helped design prioritizes community engagement, allowing the community to become actively involved in the debate of how and where “nuclear” happens, in both the educational exhibit and future plans for the nuclear waste facilities. This resonates with the attitudes reflected by my other interlocutors in Doel, who often asked, “what do I know about this?” which directly impacted their attitude on forming an opinion on the topic because of their lack of knowledge about the phaseout and nuclear energy. Nicholas emphasizes that the educational tour’s underlying intent is to promote engagement from the community regardless of their level of familiarity with the topic, because “everyone should have a say in this.”

An insightful parallel emerges from a comparison of Femke and Nicholas’ interviews, revealing a shared theme of how the lack of resources to understand the intricacies of the phaseout and nuclear energy is not merely a consequence of a lack of time or resources to understand, but also a resource to effectively promote political change, as Femke believed. Expanding upon the observations made in the previous section concerning symbolic truth, the relation between government and public is circular because they influence each other even though the power relationship between the people and the government is uneven: Thomas’ assertion that the government’s stance is molded by the public’s response and tailored to secure votes through anti-nuclear campaigns.

Amid the ongoing energy crisis is a pressing need for a reliable energy supply, which could potentially be met through nuclear energy (De Munck 2022), yet the government’s decision to invest in gas-fired power plants instead of prioritizing renewables or existing energy infrastructures contradicts both my interlocutors’ visions for the future and the country’s climate goals (Belgian Nuclear Forum 2019). While factors like solar inefficiency in Belgium’s cloudy climate or a common disapproval of the wind turbines in the landscape might contribute to the government’s hesitance to prioritize renewables, the resurrection of gas-fired power plants, even if intended to temporarily ease the energy strain, runs counter to the nation’s climate ambitions and contradicts my interlocutors’ future aspiration. However, given the prolonged nature of the nuclear phaseout and my interlocutors’ acknowledged lack of familiarity regarding the topics of both nuclear energy and the phaseout, it becomes apparent that the government leverages prevailing anti-nuclear sentiments, as endorsed by my interlocutors, to make decisions that secure political control, rather than aligning with the expectations of the Belgian population, as represented by my interlocutors.

Thus, the governmental truth strategically portrays the nuclear phaseout as an inevitable and undeniable course of action by presenting anti-nuclear narratives to the public, anchored in their symbolic truths of the phaseout, and representing it as a definitive veridical reality. The nuclear phaseout is not merely a political maneuver targeting climate change and energy efficiency in Belgium, as perceived by my Doel interlocutors, but a representation of the power dynamics between the Belgian government and the subjects of this research. Notably, the lack of emphasis on the specifics of implementing the nuclear phase out, such as the transition to gas-fired power plants before a complete transition to renewables, and a frequently revised phaseout timeline, serves as a tactic to present the nuclear phaseout in a manner that facilitates public acceptance while evading criticism or scrutiny. Most of my interlocutors argue that the driving force behind the nuclear phaseout is its outdated and unsustainable technology, a perspective shaped by their association between the detrimental effects of nuclear technologies and Doel’s current state of abandonment.

The governmental truths reveal the power structures that cultivate distinct nuclear narratives to influence how my interlocutors experience and embody specific narratives towards nuclear energy (Jasper 1990:13). As a result, the way in which my interlocutors engage with nuclear energy becomes a direct manifestation of Belgian power structures that actively situate nuclear energy as negative. However, the flaw of governmental truths stems from their inherent instability which renders them susceptible to challenge from external factors or alternative symbolic truths. The ongoing energy crisis complicates the acceptance of the phaseout policy as my interlocutors talk about their energy bills while energy institutions like the BNF, Elia Group, and Engie publish reports that emphasize the immediate and future need for nuclear energy. Additionally, my interlocutors are skeptical of the specific political processes driving the implementation of the phaseout. Lars’ reports that people “separate themselves from Belgium politics… Belgium is so hesitant to do anything that it makes it feel like a weird game they play that is separate from us.” This separation shows the phaseout’s inherent politicization rooted in anti-nuclear sentiments, as articulated by my interlocutors. Thomas also frustratingly comments on this dynamic, saying that “the more people [who] are against nuclear, then more politicians are also against it so more people vote for them.” Even Femke is critical of her relationship with Belgian politics as she asserts that “politicians will say anything to get re-elected, that I am only an important stakeholder to them as a vote.” The nuclear phaseout, thus, mirrors the symbolic truths upheld by my interlocutors, yet their energy needs and interactions with energopolitical structures contradict the narratives and goals presented by the government.

Through this analysis of the different versions of truth during my fieldwork - of veridical, mundane, symbolic, and governmental truths - the core components of the nuclear phaseout and nuclear narratives constructed by my interlocutors resides in the fact that the governmental truth depicts the nuclear phaseout as “immediately present” and an undeniable reality, despite the ongoing progression of the phaseout. Consequently, this governmental truth disrupts the mundane truth embraced by my interlocutors, because they also assume that the phaseout is complete and that nuclear no longer poses an imminent threat to their safety – a belief that contradicts the persistent anxieties and uncertainties stemming from their proximity to the power plants. Recent geopolitical events, like the war in Ukraine and the symbolic truths that justify the nuclear phaseout as a shift away from antiquated nuclear technologies, show that the government truth not only changes with the public symbolic truths but also the intricate dynamic between politics and sociocultural experiences and narratives. This circular relationship emphasizes how the energopolitics of the nuclear phaseout perpetuate an ongoing dialogue with politics and societal encounters. Evidently, the governmental truth exercises its agency in the product of subjects through its presented narrative, reinforcing the perception that the phaseout is an inevitable certainty and thus diminishes my interlocutors’ motivation and agency to further explore the nuclear phaseout and specifics of nuclear energy, despite the endeavors of pro-nuclear advocates like Thomas, Ruben, and Nicholas who actively try to promote more social investment in this sensitive and controversial energy subject.

# Nuclear Contradictions?

The culmination of this thesis, after exploring the intricate landscape of the nuclear phaseout, is to thoroughly investigate and analyze the nuclear narratives presented by the government and compare those to the truths conveyed by my interlocutors about nuclear energy. As discussed in previous sections, which break down the different regimes of truth that comprise the multilayered discourse on nuclear energy and the ensuing phaseout, a series of contradictions come to light. These contradictions reveal the disconnect between my interlocutors’ personal encounters and perceptions of nuclear energy and the phaseout, and the actual strategies employed by the Belgian government and energy policymakers. Within the scope of this thesis, two core contradictions are discussed: (1) the presented narratives of the nuclear phaseout by the government regarding the pragmatic implementation of the phaseout policy to enforce or manipulate distinct political agendas, and (2) the discord between the nuclear phaseout and the energy needs of the public/state. These contradictions emerge and persist through the lens of my interlocutors’ engagement with nuclear energy, as defined by their mundane and symbolic truths, their experiences within Doel, and their relationship and attitude towards the Belgian government. The relevance of exploring the contradictions inherent in nuclear narratives and the nuclear phaseout is to deconstruct the energopolitical structures that influence and define how my interlocutors’ approach nuclear energy, as well as their immediate energy needs (Sovacool, et al. 2017:686). This analysis aims to determine whether the government effectively aligns with or addresses the energy needs of the public and my interlocutors. Thus, contradictions in the nuclear phaseout narratives reveal a disconnect between diverging regimes of truth which create dissatisfaction and frustration from my interlocutors regarding their relationship with energy infrastructures, the government, and their aspirations for the future.

The first contradiction manifests in the governmental truths that show a disconnect between how the phaseout policy is presented and its practical implementation. While my interlocutors understood the phaseout as a transition away from nuclear energy towards renewable alternatives like solar and wind, they were also unfamiliar with the “temporary” transition to gas-fired power plants to supplement the lost energy caused by the closure of the nuclear power plants (International Energy Agency 2022:33). This transitional reliance of gas-fired power plants contradicts the governmental truth formulae that combines veridical truth and symbolic truth, which Foucault and Weir argues that this combination is to promote and enforce power over the population by appealing to multiple layers of truth to be accepted by and produce subjects that agree with the governmental policies (Foucault 2000:132, cited in Weir 2008:373). The disconnect becomes apparent in the symbolic truths embraced by my interlocutors that not only justifies the nuclear phaseout as a response to outdated and unsustainable nuclear technologies, but also their imagined futures that hope for a purely renewable energy grid to curtail carbon emissions and anthropogenic contributions to climate change. The deliberate omission of gas-fired power plants from Belgium’s nuclear phaseout narrative is a political endeavor to mitigate controversy because the policy blatantly contradicts with the narratives and ideals of my interlocutors. Particularly, the temporary transition to gas-fired power plants threatens to reverse the country’s current progress in reducing carbon emissions by accommodating new fossil fuel factories.

The contradiction that emerges between the perceptions of nuclear truths held by my interlocutors and the actions taken to implement the phaseout is not merely a controversial issue originating from Belgium’s energopolitics. Instead, it is representative of a broader disconnect, one where the government’s narratives and agendas do not align with the interests of the people. For my Doel interlocutors, this division is represented through their beliefs that the government formulates policies and enacts change without completely considering or understanding their interests and needs, especially during the energy crisis. In the lens of the ongoing nuclear phaseout, another contradiction is seen between my interlocutors’ interpretating that the phaseout is already complete, which also includes the conviction that the energy transition prioritizes a switch to renewable energy sources. However, the construction of gas-fired power plants in Vilvoorde and Awirs introduces a crucial element to the transitional stages of the nuclear phaseout, revealing a nuanced reality: Belgium’s journey toward a total renewable energy grid includes falling back to fossil fuels.

The momentary reliance on fossil fuel power plants is less about the act of ensuring a sufficient energy supply when the nuclear reactors shut down as it is the exclusion of the use of gas-fired power plants from the public knowledge of my interlocutors. Only my nuclear insiders (Thomas, Nicholas, Ruben) and a small handful of my Doel respondents (such as Lars and three others) knew about the temporary transition to gas-fired power plants. The lack of familiarity or awareness from my other interlocutors about the phaseout process stems from a variety of factors, such as a simultaneous lack of institutional resources to learn about nuclear energy and disinterest by people to become informed on their own, as emphasized during my interview with Femke. Additionally, the overarching symbolic truth of my interlocutors that presumes a renewable and sustainable future is actively supported and prioritized by the collective efforts of Belgium and other nations to reduce carbon emissions, so a fallback to fossil fuels is an unexpected turn of events that contradicts other international climate change goals (United Nations Framework Convention on Climate Change 2005). Thus, the exclusion of gas-fired power plants from the public narrative of the phaseout serves two purposes: to avoid potential backlash stemming from the contradiction of my interlocutors’ symbolic truths and to instead present the nuclear phaseout as an absolute and irrevocable truth. This strategic approach to the presentation of the phaseout narratives seeks to reduce tensions between the public and political powers to produce obedient subjects who are too far removed from having a meaningful input in the phaseout policy and instead succumb to the influential narratives of the government.

Furthermore, following the narratives of my interlocutors, is a critical analysis of the competencies and role of renewable energy in Belgium emerge. Primarily, they criticize that the installation of solar panels has become an expensive process now that the government removed the once-incentivizing tax benefits. The removal of the financial initiative has discouraged some of my interlocutors from installing solar panels on their own homes, despite the inherent potential for a reduced reliance on the main energy grid, as Thomas describes. A similar sentiment is also applied to wind turbines, as many interlocutors describe the infrastructures as an eyesore that ruins the landscape and that “no one is asking for wind turbines in their backyards,” as Lars mentioned. The social opposition to these sources of renewable energy only highlights the challenge of the practical transition to a renewable energy future, where the public acceptance of these energy infrastructures is a contentious and debated issue. This disconnect between my interlocutors’ narratives, which idealize a phaseout as a transition to renewables despite their critiques toward certain renewable energy infrastructures, and the governmental actions, which are not reflective of the public’s interests, emphasize the interplay between government initiatives and narrative construction, with a noticeable disconnect emerging between the rhetoric surrounding the phaseout and its practical implementation.

An additional contradiction revealed by the truth regimes governing my Doel interlocutors’ perspectives is the disparity between their immediate energy needs stemming from the ongoing energy crisis and the long-term energy supply considerations in Belgium. The impact of the war in Ukraine on Belgium’s energy crisis prompted my interlocutors to reassess their energy consumption, as evident through their grievances of expensive electricity bills over the past year. The energy crisis has led some of my interlocutors, like Lars, to express a more tolerant stance toward postponing the nuclear phaseout because he “can see how nuclear is fine for the present because we need energy, but that no further reactors should be built.” Even other respondents who aligned with the mundane truth that depicts nuclear energy as dangerous also acknowledged the contradiction of the governmental truth that portrays the phaseout as an absolute process despite their needs for consistent and cheap energy in the present, which could be fulfilled by nuclear.

Based on the experiences and interactions of my interlocutors with the distinct truth regimes shaping their narratives about nuclear energy, as well as the interplay of energopolitics within the energy infrastructures that influence their lived experiences, the contradictions and disconnections between my interlocutors, the regimes of truth, and the nuclear phaseout policy emerge. These inconsistencies contribute to a more nuanced understanding of my interlocutors’ intricate relationship with nuclear energy. For instance, the withdrawal of solar panel tax incentives reduces my interlocutors’ urgency to adopt renewable energy solutions, even though they anticipate a future centered around such technologies. Furthermore, the contradiction arises with their renewable-centered future as the government constructs new fossil fuel power plants to supplement the lost nuclear energy, reversing the country’s progress of addressing climate change over the last decades. The contradictions complicate my interlocutors’ nuclear narratives as they aim to phase out nuclear technology to mitigate the perceived danger of a meltdown while also advocating to retain it to temporarily alleviate the ongoing energy crisis. Additionally, while the cleanliness and sustainability of nuclear energy is debated, it is still a preferred energy source over fossil fuels. Their multifaceted narratives, encompassing aspirations for a renewable energy future, their reservations about specific renewable energy infrastructures, and the wiliness to consider delaying the nuclear despite acknowledging its potential danger (as per the mundane truth), reveal intricate dynamics with the Belgian government, which has instigated energopolitical events impacting their personal lives.

The truth regimes surrounding nuclear energy reflect the chaotic dynamic of the nuclear phaseout’s energopolitical process, which reveals the various layers and nuances that define my interlocutors’ relationships with nuclear energy while shaping their approval or disapproval of specific government actions. The Belgian government’s energy policy decisions, which may not align with my interlocutors’ truths and narratives, reveal a shared aspiration for an effective energy transition. However, their differing approaches for implementing the transition highlight the perspectives and goals of both the government and my interlocutors, despite sharing a common vision for the nation’s energy future.

In the broader discourse on nuclear energy, encompassing the phaseout and its role in the future, the interplay of various regimes of truth offers a lens to analyze how individual perceptions and power dynamics, such as governmental influence and energopolitical structures like the nuclear phaseout, shape the narratives and meanings attributed to all dimensions of one’s energy relationship (Adams 1975:17). Despite the apparent contradiction between the narratives of the nuclear phaseout and the experiences of my interlocutors, the exertion of Belgium’s energopolitical powers in the implementation of the phaseout reinforces power dynamics that produce Belgian subjects complacent to the government-presented narratives, even if these narratives conflict with their personal views. The ongoing energy crisis has not only prompted a reevaluation of people’s energy-related perceptions but has also brought to the forefront the values attached to different energy sources, embodying narratives that depict nuclear energy as risky or outdated, compared with an idealized future centered on renewable energy as the epitome of power generation (Smith 2017:3). Beyond reshaping societal attitudes and values towards energy sources, the Belgian power structures must adapt aspects of the energy transition implementation to foster efficient policy procedures while adequately considering the needs and concerns of the Belgian populace, including my Doel interlocutors. An overarching theme throughout this student revolves around the inconsistent and ambiguous policies surrounding the nuclear phaseout. Frequent revisions and reconsiderations of the initial policy introduce complexity to the narrative and the actual execution of the phaseout, creating an impression of uncertainty within the energopolitical domain. Conversely, my interlocutors reflect a desire for the government to act according to their immediate energy requirements while still adhering to the governmental truths presented about the nuclear phaseout that aligns with their vision for the future.

In conclusion, the juxtaposition of truth regimes and the complex interaction between individual experiences, governmental narratives, and energopolitical structures provide valuable insights into the intricate landscape of nuclear energy in Belgium. Navigating these interwoven dynamics reveals the multifaceted relationship that my interlocutors hold with energy, the forces that shape their perceptions, and illuminate the possible pathways to achieve an energy transition that aligns with both societal values and governmental objectives.

# Conclusion

Despite the active efforts of various pro-nuclear organizations to advance their narratives and influence policy change, the emotional connotations attributed to nuclear energy within both my interlocutors and Belgian politics symbolic the dominance of these anti-nuclear narratives over energy politics. The apparent disconnect between the regimes and truth and the nuclear narratives articulated by my Doel interlocutors, contrasted with the actions of Belgium’s government and policymakers, show the central contradiction in analyzing the ongoing discourse surrounding the nuclear phaseout in Belgium. The country’s prolonged reliance on nuclear energy introduces complexities to the implementation of the energy transition process, especially when confronting contemporary challenges like the energy crisis and external geopolitical influences.

Moreover, historical sentiments and reflections about nuclear energy, stemming from collective memories of past nuclear disasters and a perception of it as a technology of the past, contribute to the persistence of challenges associated with the nuclear phaseout on a political level. The symbolic truths embraced by my interlocutors prioritize the envisioned “good” renewable energy future of Belgium rather than the “bad” and “dangerous” nuclear energy (Adams 1975:189). As a result, this study highlights how my interlocutors have formed an understanding of and relationship with nuclear energy that is situated in a vague aspiration for Belgium’s future – one free from nuclear energy. Whether this vision of the future is shaped by energopolitical narratives that mold and promote anti-nuclear perspectives or is a consequence of shared social anxieties about nuclear accidents, it becomes evident that the nuclear phaseout is perceived as a progressive step toward enhancing Belgium’s energy landscape, notwithstanding the inherent inconsistency and contradictions that characterize the path to achieving a complete phaseout.

Acknowledging the complications in implementing consistent energy policies within a dynamic and ever-changing societal landscape, and considering the intricacies of Belgium’s political system that are before the scope of this study, the proposal for a transparent and unwavering energy policy might appear simplistic or redundant within the assumed expectations for political structures. However, as this research has uncovered, the multi-layered contradictions embedded within the nuclear phaseout policy conceal and downplay specific elements, such as regressing back to fossil fuels, while simultaneously crafting an optimistic narrative around renewable energy – an idealistic portrayal that is impractical for Belgium’s energy sustainability based on the lack of infrastructure and social criticisms about the accessibility and aesthetics of certain renewable sources (Smith 2017:3). The limited disclosure surrounding investments in “temporary” fossil fuel infrastructures and the vague promises of substantial investments in renewable energy sources presents the Belgian population with a specific narrative that selectively omits certain information and thus exacerbates the disconnect. Even when contemplating policy revisions or shifts in implementation strategies, maintaining transparent communication with the Belgian population and keep them informed of changes, regardless of whether the changes align with their individual beliefs, would likely promote positive changes in behaviors and attitudes towards energy policies. This approach offers an alternative to the inevitable conflicts arising from engagement with a population that is either negatively aligned with the government power structures or remains complacent to political actions.

This research sought to analyze the Belgian nuclear phaseout through the bottom-up lens of local population’s perspectives, while acknowledging the instrument role of power infrastructures in shaping and defining the narratives of the phaseout. However, future research on this topic could benefit from a posthuman or other-than-human analysis, particularly in the context of the abstract concept of nuclear energy contrasted with its tangible embodiment within the reactors. Additionally, an applied anthropological approach to the phaseout policy, intimately examining how pro- and anti-nuclear organizations interact with local communities and power structures as an in-between actor, would offer deeper insights into the influence of different power entities and the energopolitical factors that and define energy narratives.

In conclusion, the contribution of anthropology in investigating a scientific domain such as nuclear energy, within a deeply politicized context, shows the intricate and complicated dynamic between the values and meanings of nuclear energy within a societal context. It also highlights how the attitudes of local populations can influence the effectiveness of energy transition policies, thus inspiring a more profound discourse concerning power dynamics and specific narratives between the regimes of truth, the experiences of my interlocutors, and energy power structures. While other existing literature often concentrates on the environmental, economic, or technical aspects of nuclear technologies or phaseouts in other countries, the anthropological analysis reveals the significance of exploring energy discourses from a socio-cultural perspective to outline the inconsistencies, contradictions, or challenges inherent to the implementation of effective energy policies. Nuclear energy is just one of several energy sources involved in Belgium’s energy transition, and a more comprehensive analysis into the interconnectedness among various energy infrastructures could aid in bridging the divide between civil society and power structures, ultimately shaping the role and trajectory of nuclear energy in Belgium’s present and future energy landscape.

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# Appendix

## Appendix A: Maps of Doel

### Figure A1: Doel and the Surrounding Area

Map showing the location of Doel in proximity to nearby cities and key landmarks like the Doel nuclear power plant and the Scheldt River. Map created using DataWrapper 2023.

**A map of a city

Description automatically generated**

### Figure A2: Map of the Town of Doel

Map of the town of Doel with key locations that are relevant for this thesis. Map created using DataWrapper 2023.

A map of a city

Description automatically generated

At the beginning of this fieldwork, De Mollen was only open two days a week (Tuesdays and Thursdays), and now it is permanently closed. The Church of Our Lady Ascension only hosts one weekly service on Sundays at 9am. Both locations are included on the map because they are main points of interest for visitors even if I do not go into detail about their locations in the thesis.

Appendix B, C, D, and E list some of the questions I planned for my various interviews and were not always asked in the exact order presented here.

## Appendix B: General Interview Questions for Doel Participants (Including Interview with Femke)

* What brings you to Doel today?
  + How did you hear about Doel?
  + What do you think about it now that you’re here? How does it make you feel?
* How do you feel about being so close to nuclear reactors?
* Phaseout questions
  + Did you know that the government is planning on shutting the reactors down?
  + How does the idea of shutting down the reactors make you feel?
  + Why do you think they’re being shut down?
* What is your opinion about nuclear energy?
  + If yes, tell me about your experience. Did it make you nervous to be in such proximity to the reactors or not so much?
  + If not, why not?
* What is the role of nuclear energy in Belgium in the future?
* Do renewables play a role in Belgium’s energy future?
  + Do you own solar panels?
  + How do you feel about the wind turbines here because there’s so many?
* What does the future of energy look like in Belgium?
* Have you been impacted by the current energy crisis?
  + If yes, how so? Has it made you change how you use energy?
  + What do you think can be done to help alleviate the impact of the energy crisis?
* What do you know about nuclear energy?
  + How do you think you or others can learn more about it?

## Appendix C: Interview Questions for Engie Workers

* Tell me about your work: what did you study? How long have you been working at Engie?
* When you first began working at the power plant, do you remember if you felt any anxiety or hesitation with working for or at a nuclear plant? What has changed since then, if at all?
* How do other people respond to you working at a nuclear plant?
* How do you feel about the nuclear phaseout? (Practical job tension, technology, etc.)
  + Has the phaseout impacted your job at all? Such as your tasks and responsibilities? How do you imagine it will change with the shutdown of each reactor?
* Have you visited Doel? What are your thoughts about its current state?
* In my research in talking to people in Doel, there’s a 50/50 mix of people who claim, “Yes, I’m a little nervous about being so close to the nuclear plant. Please don’t let this be the day that something goes wrong.” But there are others who are like, “I don’t even think about it, I forgot it was there until I saw it.” But most of the people I’ve talked to think that we as a society are beyond nuclear energy, that nuclear energy does not have a future in Belgian energy. I’m curious what do you think about that kind of statement and why people might feel that way?
* In thinking about what the nuclear industry can do to communicate more with people about their processes, what would that first step be? What can be done differently to raise more awareness for people?
* There have been a lot of revisions to the phaseout policy since 2003, and I’m looking at why the phaseout is a still topic of discussion after all these years. Why is Belgium still going through with the phaseout? What kind of background is there for why it’s happening? Or rather, not happening as fast as originally planned?
* I’m not from Belgium, and I often hear from my respondents that Belgian politics is chaotic and it comes across as chaotic. The people I talk to in Doel express their frustrations of not feeling heard by politicians or that the politics operate on its own, separate from the people. I was wondering if this was also maybe how you felt about the current politics in Belgium?
  + Is there something people can do to feel like they have an impact on influencing government decisions besides voting? Or something that the government can do to include the voices of the people more?
* Do you own solar panels at home? Is it an option?
* What does the future of energy look like to you? What does it look like to you in a perfect world? What do you think will likely be the future of energy?
* What do you wish people knew about nuclear energy? About your reactors?

## Appendix D: Interview Questions for Nicholas

* Where in Belgium did you grow up? (Influences questions if in iodine proximity to reactors)
* Tell me about your experience with the exhibition on nuclear waste management:
  + What were your roles/responsibilities in helping design this exhibit?
  + What did you learn? How did your awareness/opinions about nuclear energy change before and after your work?
  + What is the most beneficial/useful/successful part of the exhibition, in your opinion? Which part is your favorite?
  + What do you think could be changed/improved upon now that it's been open for over a year?
  + What is something that you wish people would know about nuclear (waste/energy/technologies) in general?
* Follow-up questions about my visit to the exhibit:
  + The nuclear phaseout is not mentioned at all in the exhibitions, why is that/why do you think that is? Is it necessary?
  + What kind of effect has the exhibit had on the community? Or the exhibit’s outreach to the community?
  + The emphasis on community feedback (the “café”, the face-orbs, etc.) – what does the exhibit do with this input from visitors?
* How do you feel about nuclear energy?
  + How do you feel about the nuclear phaseout? What do you know about it?
  + If pro nuclear energy, what is something that you wish people would know about nuclear in general?
* Has the energy crisis impacted you? In what ways?
  + Have you taken any steps/measures to change your energy usage habits?
  + Do you own solar panels?
* What does the future of Belgium's energy supply look like to you?
  + What is the role/extent of renewables?
  + Belgium has a weird climate for solar panels (too rainy/cloudy), and there's been a lot of reports of people who disapprove of the wind turbines. Where will our energy come from?
* Have you ever been to Doel or Tihange to see the power plants?
  + If yes, tell me about your experience. Did it make you nervous to be in such proximity to the reactors or not so much?
  + If not, why not?

## Appendix E: Interview Questions for Thomas

* Have you ever visited Doel?
  + If yes, what has your experience been like with each visit?
  + If yes, how does it make you feel to be there? What feelings do you reflect on?
  + Do you plan to go (back) to Doel in the future?
* You live just outside of Doel, in proximity to the nuclear radiation range, right? How does it make you feel to be that close to the nuclear reactors?
* What are your thoughts on the nuclear phaseout?
* Belgium/Europe is currently going through an energy crisis, has that impacted you at all?
  + If yes, have you had to change your energy habits at all?
* The energy crisis has been one of the main influences in delaying parts of the phaseout. Do you feel that this phaseout could be reversed? Or will they ever be completely shut down?
* What other alternatives are there to nuclear energy?
  + Do solar and wind play a role in Belgium’s energy future?
* Do you own solar panels?
* What does the future of energy in Belgium look like to you? In your ideal world as well as what you think might happen?
* Regarding the idea of the Green Party and the Belgian government that oversees managing energy in the country, do you feel, as a Belgian citizen, that you have a say in what can happen on a political level?
  + What can the government do to accommodate or consider the needs of the Belgian citizens during this energy crisis?
* What do you wish people knew about nuclear energy?
  + How can people become more involved in learning about nuclear energy?
* Why do you think so many people are anti-nuclear energy?

1. It is crucial to emphasize that this thesis does not intend to diminish the significance of renewable energy; rather, its aim is to illustrate how my Doel interlocutors perceive and interpret diverse energy sources. [↑](#footnote-ref-2)
2. See Figure A1 in Appendix. [↑](#footnote-ref-3)
3. See Figure A2 in Appendix. [↑](#footnote-ref-4)
4. Beveren Verbindt. (2023). *Doel.* Beveren Tourism. <https://www.beveren.be/nl/toerisme/doel> [↑](#footnote-ref-5)
5. Closed June 4, 2023. [↑](#footnote-ref-6)
6. Blythe, Derek. (2022, January 2022). Hidden Belgium: The ghost town of Doel. *The Brussels Times.*  https://www.brussels times.com/203943/hidden-belgium-the-ghost-town-of-doel [↑](#footnote-ref-7)
7. Koester Doel. (2023, April 24). *Herita is going to restore the Hooghuis in Doel.* Koester Doel. [https://koesterdoel.be/index.php/2023/04/28/herita-gaat-het-hooghuis-in-doel- restaureren/](https://koesterdoel.be/index.php/2023/04/28/herita-gaat-het-hooghuis-in-doel-%20restaureren/) [↑](#footnote-ref-8)
8. There are multiple types of truth regimes that exist in contemporary research by other authors, such as objective, normative, subjective, complex, moral, historical, scientific, convenient, etc., but this thesis will focus on the aforementioned four as they appear as broader categories of truth that adequately encompass the multiple layers of analysis of nuclear narratives. [↑](#footnote-ref-9)
9. VU: KU Leuven, Faculty of Architecture. (2018). *Plan Doelland.* AOB Spatial Dysfunctions Strategies. <https://www.plandoelland.com/info> [↑](#footnote-ref-10)
10. Doel 2020. (2008, February 5). “Our Goal for Tomorrow.” Doel 2020: Vision of the Purpose of the Future. <http://doel2020.org/page.php?ID=125> [↑](#footnote-ref-11)
11. Koester Doel. (2023, April 24). *Herita is going to restore the Hooghuis in Doel.* Koester Doel. <https://koesterdoel.be/index.php/2023/04/28/herita-gaat-het-hooghuis-in-doel-restaureren/> [↑](#footnote-ref-12)
12. For more information, check out the BNF’s 2022 Opinion Poll: <https://www.nucleairforum.be/actualiteit/nieuws/opiniepeiling-2022> [↑](#footnote-ref-13)
13. The names of all my participants have been pseudonymized. [↑](#footnote-ref-14)
14. At the time of this interview, both reactors were still in operation; Doel 3 had not shut down yet. [↑](#footnote-ref-15)
15. I put the word “Belgians” in quotations, here and later, because Lars and my other interlocutors generalize how they assume Belgians to relate to the Belgian government, but I do not intend to present my research as a generalization of “the Belgian experience” because that was not my focus or what I conducted fieldwork on. [↑](#footnote-ref-16)