The Dual Imperative of Dutch Energy Policy: Balancing Global Energy Hub Status with Industrial Decarbonization

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Introduction

The global imperative to transition towards a sustainable and low-carbon energy system has profoundly reshaped national policies worldwide. In this context, the Netherlands presents a distinctive case study where longstanding economic interests as an energy trading and transit hub intersect with the urgent need to decarbonize its industrial sectors. This research document critically examines the Dutch energy policy framework, exploring how the government balances ambitious climate commitments—such as significant reductions in greenhouse gas emissions—with strategies that preserve the country's pivotal role in international energy markets.

This study investigates the dual-track approach of the Dutch government: on one hand, advancing infrastructural investments and regulatory measures designed to reinforce the Netherlands' status as a global energy hub; and on the other, implementing policies aimed at industrial decarbonization and sustainable transformation. By analyzing policy documents, official statements, investment patterns, and stakeholder perspectives, this research seeks to illuminate the underlying tensions and synergies inherent in the nation's strategy. In doing so, it contributes to a deeper understanding of how historical legacies and current economic imperatives shape the evolving energy transition narrative in a highly competitive international arena.

Ultimately, this document aims to provide a comprehensive overview of the complexities of Dutch energy policy. It highlights the challenges of reconciling short-term economic interests with long-term environmental goals and offers insights into the potential pathways for aligning energy security with sustainable industrial transformation.

1. Government Perspective & Policy Commitments

The Dutch government's official stance is that it aims to simultaneously drive decarbonization and maintain the Netherlands' long-standing role as an energy hub. In practice, policy documents articulate ambitious climate targets – a 49% GHG emission cut by 2030 and 95% by 2050 (vs 1990) – alongside recognition of the country's pivotal role in European energy trade (The Netherlands 2020 - Energy Policy Review). The 2019 Climate Agreement, for example, lays out measures for all sectors (industry, power, transport, etc.) to reach these targets (The Netherlands 2020 - Energy Policy Review). At the same time, the government emphasizes continuity in energy trade: "The Netherlands is a key player in European energy markets... an important transit and trade hub for natural gas, oil and electricity", and it explicitly "aims to maintain its role as an energy hub while transitioning to a carbon-neutral economy" (The Netherlands 2020 - Energy Policy Review). This dual objective is central to the government's narrative – indicating that even as the energy system is decarbonized, the country's infrastructure for importing, storing, and distributing energy should remain a strategic asset.

Concrete policy commitments reflect this twin priority. The government's Hydrogen Strategy and climate policy make large bets on new energy carriers that allow continued trade. For instance, the Netherlands has adopted a national Hydrogen Strategy to develop a robust market for low-carbon hydrogen, seeing hydrogen as key to decarbonizing heavy industry and as a future export commodity (The Netherlands 2020 - Energy Policy Review). The strategy explicitly positions the Netherlands to become a European hydrogen gateway, leveraging its ports and gas infrastructure. Major policy packages in recent years fund both industrial emission cuts and hub infrastructure. The Climate Act (2019) legally obliges the government to prepare climate plans and meet interim targets, underscoring commitment to domestic emission reduction (The Netherlands 2024). In parallel, the government created a multi-billion-euro Climate Fund and earmarked substantial budgets for technologies like carbon capture and storage (CCS) and hydrogen networks that serve industry and reinforce the country's transit role. A €28 billion "Climate Package" unveiled in 2023 includes 120 measures; notably, a large portion of its initial outlays in 2022–2023 went to hydrogen projects (The Netherlands 2024). This suggests that while decarbonization is the overarching goal, building the infrastructure for a new energy-trading economy is a front-loaded priority in government spending.

Legislative and regulatory actions also straddle these priorities. The government has tightened CO₂ targets for industry (requiring a 59% cut in industrial emissions by 2030 and climate neutrality by 2050) and set up incentives for cleaner production (Dutch industrial decarbonization policy effectively supports CCS, but needs further push on low-carbon and green hydrogen to meet climate targets). It expanded the Sustainable Energy Transition Incentive scheme (SDE++), which now subsidizes industrial low-carbon technologies – favoring mature solutions like CCS to quickly curb emissions (Dutch industrial decarbonization policy effectively supports CCS, but needs further push on low-carbon and green hydrogen to meet climate targets). This indicates a pragmatic bent: opting for ready technologies to hit climate targets while avoiding measures that could undermine industrial competitiveness in the short term (Dutch industrial decarbonization policy effectively supports CCS, but needs further push on low-carbon and green hydrogen to meet climate targets). At the same time, the government has forged international energy deals and adjusted regulations to bolster its import/export capacity - for example, fast-tracking LNG import terminal capacity after 2022's gas crisis, and signing cooperation agreements for green hydrogen imports (e.g. with Spain, Oman) to secure the Netherlands' place as a future hydrogen import hub (Nederland wereldwijde hub voor waterstofimport, transport en opslag). In summary, official policy commitments reflect a balancing act: aggressive climate goals with policies to green the industrial sector, coupled with proactive steps to preserve and evolve the country's role as an energy trading crossroads. The critical question is whether this balance is tilted – implicitly if not explicitly – toward sustaining the "energy hub" economic model, perhaps at the expense of a more radical transformation of the industrial base.

2. Language and Narrative Analysis

Narrative framing in Dutch energy policy documents often signals pride in the Netherlands' energy hub status and embeds climate action within that context. Government statements and strategy papers frequently use phrasing that emphasizes continuity of the trade role. For example, the International Energy Agency noted that "The Netherlands aims to maintain its role as an energy hub while transitioning to a carbon-neutral economy", explicitly highlighting a goal of preserving the hub function even as energy sources change (The Netherlands 2020 - Energy Policy Review). Similarly, domestic communications underline this theme. A 2023 government press release on hydrogen states that the Netherlands and Europe have "big hydrogen ambitions" and calls for "vigorous policy" on both supply and demand of hydrogen explicitly mentioning active support for hydrogen import alongside domestic production (Kabinet investeert fors in opschaling waterstof | Nieuwsbericht | Rijksoverheid.nl). Minister Rob Jetten is quoted reinforcing that dual narrative: "We strengthen our energy relations for the import of hydrogen, but we also want to significantly grow hydrogen production within the Netherlands... Meeting our CO2 goals comes first, and hydrogen is indispensable to that" (Kabinet investeert fors in opschaling waterstof | Nieuwsbericht | Rijksoverheid.nl). The language ("strengthen energy relations," "import of hydrogen," "hub function") suggests that being a conduit in international energy chains is portrayed as a positive, even necessary, component of the energy transition, not antithetical to it.

In contrast, the framing of **industrial transformation** in policy documents tends to be couched in terms of making industry **sustainable and competitive** rather than shrinking or fundamentally altering it. The government's *Vision on Industry* (2020) exemplifies this tone. It opens by praising the importance of Dutch industry to the economy and states "*The Netherlands strongly needs industry, now and in the future,*" while acknowledging that this must be accompanied by substantial CO₂ reductions and circular use of resources (Government.nl) (). The emphasis is on an "offensive industrial strategy" where Dutch industry remains robust and simply becomes cleaner and more innovative. Phrases around industrial decarbonization often highlight **technological solutions** (hydrogen, CCS, electrification) rather than downsizing. For instance, policy discourse describes creating a "climate-neutral industry" by 2050 through **fuel switching and efficiency** – e.g. replacing fossil hydrogen with green hydrogen in chemicals, fitting capture technology to factories – as opposed to questioning whether certain high-emitting industrial activities should continue at current scale. This narrative approach can implicitly subordinate the notion of **structural change in industry** to the idea of **technological greening**, aligning with the goal of maintaining industrial capacity and trade competitiveness.

There is also a notable optimistic tone about synergy: policy rhetoric often implies that turning the Netherlands into a hub for new energies (like hydrogen) will enable domestic industrial transformation. The government portrays hydrogen, in particular, as a win-win: a way to cut industrial emissions and a growth opportunity. Official language speaks of the Netherlands being "in a good position to make a significant contribution to Europe's low-carbon hydrogen market, thanks to its current role as a European energy hub" and strong industrial clusters (The Netherlands as a Future Hydrogen Hub for Northwest Europe: Analysing Domestic Developments and International Engagement | Research Institute for Sustainability). This kind of phrasing suggests that the country's hub status is leveraged as a positive narrative device ("because we are an energy hub, we can lead in hydrogen"), subtly reinforcing the priority of remaining a central exchange point. Meanwhile, terms like "offensive strategy," "green growth," and "partner of choice" in industry policy letters convey that industrial decarbonization is framed as an economic opportunity and a modernization — not as a threat to the industrial base (Government.nl). Nowhere in mainstream policy communications is the downsizing of energy-intensive industry explicitly advocated; instead the narrative centers on "sustainable growth". This narrative alignment means that maintaining the hub/trading role is cast as complementary to - rather than in conflict with - industrial transformation, potentially papering over trade-offs. However, as later sections will show, independent observers and wording outside official brochures sometimes hint that the transit/trade aspect often takes a lead role implicitly, with industrial change presumed to follow along.

3. Resource Allocation & Investments

Financial commitments by the Dutch government provide concrete clues to its priorities, and here we see significant investment in infrastructure and technologies that bolster the Netherlands' position as an energy transit hub – notably in hydrogen and carbon capture – alongside support for industrial emissions reduction. The recently established Climate Fund dedicates tens of billions of euros through 2030 for the energy transition, and a large share is channeled into developing hydrogen supply chains, networks, and CCS. In fact, a national climate package announced in 2023 (total €28.1 billion) revealed that a considerable portion of initial spending in 2022–2023 was directed toward hydrogen projects (The Netherlands 2024). Roughly €9 billion was reserved specifically to scale up the hydrogen economy – funding electrolysers, import facilities, and subsidies to induce industrial hydrogen use (Kabinet investeert fors in opschaling waterstof | Nieuwsbericht | Rijksoverheid.nl). For example, the government set aside €300 million to co-fund the H2Global initiative, which helps finance imports of green hydrogen/ammonia into Northwest Europe (Kabinet investeert fors in opschaling waterstof | Nieuwsbericht | Rijksoverheid.nl). It is also investing in a national "hydrogen backbone" pipeline network to connect ports and industrial clusters, and in storage capabilities, effectively building the hardware for a hydrogen trading hub. These are long-term **infrastructure bets** that arguably extend beyond what is needed solely for Dutch industry consumption, pointing to an intent to serve wider regional markets.

By comparison, direct investments in transforming industrial processes – while still significant – often come in the form of subsidies or support mechanisms to help industries adopt decarbonization technologies rather than public infrastructure projects. Through the SDE++ subsidy scheme and other funds, the government is supporting industrial CCS installations (notably the **Porthos project** in Rotterdam's port for refinery and chemical CO₂ storage received over €2 billion in subsidy) and electrification or efficiency upgrades in factories. These measures are substantial, but many are geared toward mitigating emissions from existing industrial operations (capturing or offsetting their carbon) instead of fundamentally changing the nature of those operations. Indeed, CCS is heavily favored as a cost-effective bridge: the government has projected at least 10 million tons of CO₂ per year cut by 2030 through CCS, explicitly calling the technology "indispensable" for 2030 targets and emphasizing that CCS "helps [industrial] users to remain in the Netherlands and invest in sustainable ways" (Kamerstuk 31793, nr. 273 | Overheid.nl > Officiële bekendmakingen). This candid statement in a parliamentary letter underscores that protecting industrial competitiveness and presence is a key criterion in climate investment – funding CCS so firms can stay put (rather than, say, relocating or cutting output) aligns with preserving the industrial base and the country's role as a service provider (in this case, potentially even storing CO₂ from other countries' industries in Dutch reservoirs) (Kamerstuk 31793, nr. 273 | Overheid.nl > Officiële bekendmakingen).

Comparative budget figures illustrate the tilt. By late 2022, observers noted that the Netherlands was spending far more public money on fossil-fuel related activities than on renewables - climate scientist Pieter Pauw labeled it "double policy," saying "the Netherlands invests many more billions in the fossil industry than in renewable energy... it's inefficient and delays the transition" (Nederland investeert nog steeds miljarden in fossiele industrie: 'Het vertraagt de transitie naar klimaatneutraal beleid' - EenVandaag). While this critique (from a Dutch news program) was referring broadly to fossil fuel investments (such as tax breaks or state investments in fossil infrastructure), it highlights a perception that public resources still disproportionately support the status quo energy system. On the renewable side, the Netherlands has ramped up support for offshore wind farms (a large chunk of renewable capacity expansion is happening via tenders for North Sea wind), and yet even these are often justified as feeding into the hydrogen plans or electrification of industry, again linking back to the hub concept (e.g. offshore wind to produce green hydrogen at scale for domestic use and export). Meanwhile, port expansions and transit infrastructure have seen continuous investment. The Port of Rotterdam – Europe's largest refining and petrochemical hub – has government and EU support to become a CO₂ and hydrogen throughput hub, with projects like new import terminals for ammonia (a hydrogen carrier) and pipelines to Germany. In 2022, facing the European gas crisis, the Dutch government swiftly facilitated a new LNG import terminal at Eemshaven, investing in capacity that not only served Dutch needs but also those of neighboring countries, reinforcing the transit role for natural gas in the short term.

In summary, the balance of financial effort suggests that the government is heavily funding the means to supply clean energy (and carbon mitigation) to industry, thereby keeping industrial activity viable and positioning the country as a key transit/trade center in a decarbonized energy system. There is support for direct industrial innovation (like pilot projects for electrification or circular processes in steel and chemicals), but these receive less public visibility and arguably less urgency than the big-ticket infrastructure items. The

resource allocation aligns with an implicit priority: build the new energy infrastructure first (so the Netherlands secures its hub status early), and use those new resources to gradually clean up industry, rather than the other way around.

4. Public & Political Discourse

Public statements by officials and debates in political forums reflect the dual focus – with notable enthusiasm from leaders about the Netherlands' role in international energy trade, while others push for a stronger focus on industrial transformation. Government representatives frequently tout initiatives that cast the country as an indispensable energy crossroads. For instance, in June 2023, King Willem-Alexander and Climate/Energy Minister Rob Jetten traveled to Spain to seal a deal for importing green hydrogen, an event heralded by Dutch media and research organizations as "the first hydrogen supply chain from abroad to the Netherlands" and a step toward the Netherlands becoming a worldwide hydrogen import, transport, and storage hub (Nederland wereldwijde hub voor waterstofimport, transport en opslag). TNO (a prominent Dutch research institute advising the government) emphasized in its coverage that "the Netherlands wants to play a prominent role as an importer and transit port of hydrogen in Europe" (Nederland wereldwijde hub voor waterstofimport, transport en opslag). Such messaging – amplified in press releases, conferences, and industry events – shows the political narrative spotlight: positive stories about forming international partnerships to solidify the Netherlands as the go-to conduit for new energy carriers.

4.1. Political Divisions on Energy Policy

Within Dutch politics, views diverge on whether to prioritize the transit hub role or accelerate industrial decarbonization, and these differences have sharpened in the past two years. The outgoing centrist-right coalition (led by PM Mark Rutte until 2023) generally embraced the "energy hub" narrative, with the conservative VVD party and its allies often stressing economic continuity and energy security. Parties like the VVD and CDA support expanding import infrastructure and international energy trade, seeing it as vital for Dutch business. They tend to frame the climate transition in terms of innovation and market opportunities (e.g., becoming a hydrogen trading center) rather than strict regulation of industry.

By contrast, **left-leaning parties and greens** argue the government's balance is off-kilter and call for a more aggressive industrial transition. The Labour-Green alliance (GroenLinks-PvdA) in particular has been outspoken that heavy industry must cut emissions faster – even if that means tougher rules or reducing the Netherlands' role in fossil fuel logistics. These differences were evident in the 2023 election platforms. GroenLinks-PvdA campaigned to "**abolish fossil subsidies as soon as possible**" and make "the biggest polluters foot the bill" (Netherlands' future climate policy unclear after far-right's shock election win | Clean Energy Wire), explicitly challenging the status quo where major industries enjoy tax exemptions on energy. They also oppose over-reliance on stopgap solutions like carbon capture; the left-wing alliance stated there should be "no additional subsidy for underground CO_2 storage", calling CCS a "temporary solution that allows big polluters to wait longer to make the switch" (Netherlands' future climate policy unclear after far-right's shock election win | Clean Energy Wire).

In contrast, the right-populist parties – notably Geert Wilders' PVV and the Farmer–Citizen Movement (BBB) – criticize ambitious climate measures and tend to support a "business-as-usual" approach for industry. Wilders's PVV has bluntly called climate policies "pointless climate hobbies" and prioritizes keeping energy prices low (Netherlands' future climate policy unclear after far-right's shock election win | Clean Energy Wire). The PVV and BBB align on maintaining existing energy assets (like natural gas and even coal plants) and are skeptical of burdening industry; implicitly, this means doubling down on the Netherlands' traditional energy roles (gas production/trade, refining) and slowing the push for industrial overhaul.

4.2. Electoral Sentiment and Future Political Dynamics

Public opinion in the Netherlands is mixed – broadly pro-climate in principle, but divided on pace and priorities, and this is translating into new political dynamics. Surveys show that a majority of Dutch voters are concerned about climate change and support the energy transition in general. For instance, three-quarters of adults worry about climate-change impacts like droughts and floods, according to a 2023 CBS poll (Three-quarters of Dutch adults worry about impact of climate change | CBS). However, when it comes to concrete policy priorities, energy/climate often competes with other issues. Ahead of the November 2023 general election, an Ipsos poll found only 24% of voters ranked climate and sustainability among their top issues, placing it fifth after cost of living, healthcare, immigration, and housing (Netherlands' future climate

policy unclear after far-right's shock election win | Clean Energy Wire). This suggests that while climate policy is important to many, it can be overshadowed by immediate economic and social concerns – a reality political parties are responding to. Notably, the same poll indicated **deep polarization on climate leadership**: 40% of voters said the Netherlands *should not* take a leading role internationally on climate, while about 27% believed it should (Netherlands' future climate policy unclear after far-right's shock election win | Clean Energy Wire). In other words, roughly **two-fifths of the electorate prefers a cautious approach**, favoring not to move faster than other countries – a stance aligned with those prioritizing the transit/trading status quo or fearing economic downsides. Meanwhile, a smaller but significant group (roughly one-quarter) is enthusiastic about the Netherlands pushing the envelope on climate action, which aligns with parties demanding a stronger industrial transition.

These sentiments have begun to reshape the political landscape. On one hand, **right-wing and populist parties have gained ground by tapping into skepticism about costly climate policies.** Geert Wilders' PVV achieved a shock victory in 2023, in part by campaigning against "billions for climate nonsense" and promising to halt measures like the CO₂ tax and home heat pump mandates (Watch out Brussels, Geert Wilders' new Dutch government is coming – POLITICO) (Watch out Brussels, Geert Wilders' new Dutch government is coming – POLITICO). Similarly, the BBB rose to prominence earlier in 2023 by championing farmers against stringent environmental (nitrogen) rules, implicitly questioning the pace of green reforms. The success of these parties signals that a notable bloc of voters is wary of an aggressive industrial transition if it threatens jobs or raises prices. Their rise could **slow the momentum** for climate policy in the short term – indeed, the incoming right-leaning coalition as of late 2023 has pledged to stick to EU climate targets but cancel many domestic measures, favoring a more gradual path (Watch out Brussels, Geert Wilders' new Dutch government is coming – POLITICO) (Watch out Brussels, Geert Wilders' new Dutch government is coming – POLITICO). This could mean continued emphasis on things like hydrogen and CCS (which the new coalition does support) but less pressure on industries to change immediately.

On the other hand, we see **new alliances and parties on the pro-transition side** that could reshape future debates. The union of GroenLinks and PvdA under Frans Timmermans' leadership created a sizeable left-of-center force explicitly prioritizing climate action and industrial policy. They finished a strong second in 2023's vote (Netherlands' future climate policy unclear after far-right's shock election win | Clean Energy Wire), indicating substantial voter appetite for a program that couples social justice with a green transformation. Timmermans, the former EU Climate Commissioner, has personal credibility on pushing industry to decarbonize, and his return to national politics energised climate-conscious voters. Additionally, smaller parties like Volt (pro-European liberals) and D66 (centrist liberals) also advocate technological innovation and stricter climate goals, especially among younger, urban voters. **Youth-led and grassroots movements** continue to influence electoral sentiment as well – the visibility of climate protests and the urgency voiced by young climate strikers keep climate on the agenda for mainstream parties that don't want to lose the younger demographic. This has pushed even centrist parties to at least endorse goals like net-zero by 2050 and support things such as offshore wind expansion.

Looking ahead, political analysts suggest that any future governing coalition will need to reconcile these diverging public pressures. If a left/green coalition were to come to power in the near future, we would likely see a decisive shift toward prioritizing industrial decarbonization – for example, rapidly phasing out fossil fuel subsidies (a position supported by ~64% of voters, combining those who think policy is insufficient) and investing heavily in clean tech for industry. This could mean the Netherlands accepting a slightly smaller role in fossil transit (less gas trading or refining) in exchange for becoming a leader in green manufacturing (like green steel, circular chemistry, etc.). Conversely, if right or center-right parties dominate, they may continue the current line of "climate yes, but not too fast", maintaining the transit hub focus and implementing only gradual industrial changes to protect competitiveness. Importantly, new political groups could emerge if public opinion shifts – for instance, a dedicated climate party or a Green New Deal-style movement has been floated in discussions, although none has broken through yet.

One trend to watch is the intersection of climate with economics in voters' minds. As clean energy technologies become cheaper and the EU imposes stricter rules (like the carbon border tax), Dutch public opinion might tilt in favor of capturing new green industries at home. If voters see that countries like Germany or Denmark are creating jobs in hydrogen electrolyzers or EV batteries, there could be pressure on Dutch politicians to not fall behind by focusing only on transit. Additionally, local issues (like air quality around Tata Steel or in Rotterdam's port) are turning into electoral issues; communities near industrial sites are demanding change, which gives political momentum to those advocating industrial cleanup. In summary, **electoral sentiment is in flux**: the past two years have seen climate policy become a politicized issue with winners on both the skeptic side (PVV/BBB) and the activist side (GL-PvdA). Future elections will likely

hinge on the public's experience – if the transit-focused approach results in energy security but continued emissions and pollution, voters may lean green; if rapid transitions cause economic pain, voters may lean conservative. This dynamic could ultimately determine whether an alternative, industry-focused strategy gains real traction at the ballot box and in government policy.

5. Historical & Contextual Comparison

Historically, the Netherlands has cultivated its status as an energy trading and transit country, and this legacy heavily informs current policy priorities. As far back as the 1950s-60s, the discovery of the Groningen gas field turned the Netherlands into a major natural gas producer and exporter. By the 2000s, even as domestic production waned, the Dutch government explicitly set a course to enhance the country's role as "the gas roundabout of Northwest Europe." In 2005, the cabinet adopted the "Gasrotonde" strategy, aiming to make the Netherlands a central gas transit hub – a place where gas is imported, stored, traded, and then re-exported across Europe (Gasrotonde: nut, noodzaak en risico's | Rapport | Algemene Rekenkamer). The rationale was twofold: bolster energy security (ensure diverse gas supply for the Netherlands via a hub) and strengthen the economy through transit fees, trading profits, and industrial activity around gas (Gasrotonde: nut, noodzaak en risico's | Rapport | Algemene Rekenkamer). Pursuing this, stateowned companies like Gasunie and EBN invested around €8 billion between 2005 and 2014 in new pipelines, storage (e.g. Bergermeer gas storage), and even foreign gas infrastructure acquisitions (Gasrotonde: nut, noodzaak en risico's | Rapport | Algemene Rekenkamer). This period established a pattern: the Dutch state was willing to invest heavily in energy infrastructure for strategic positioning. Notably, the Court of Audit later found the government had approved massive gas infrastructure investments with insufficient consideration of public interest tests like sustainability (Gasrotonde: nut, noodzaak en risico's | Rapport | Algemene Rekenkamer) (Gasrotonde: nut, noodzaak en risico's | Rapport | Algemene Rekenkamer) – an indication that economic and security motives dominated environmental concerns at that time.

Fast forward to the present era of climate action, and that historical context translates into an emphasis on remaining an energy hub, but with "green" credentials. The same way the Netherlands once pushed to be a gas trading hub, it is now pushing to be a power and fuels hub for renewables. The government's narratives around becoming a North Sea electricity hub (through offshore wind connections to other countries) or a hydrogen hub (importing green hydrogen from sun-rich regions) are essentially a modern echo of the gas hub strategy, updated for decarbonization. The continuity is evident: geography and infrastructure that made the Netherlands pivotal for oil and gas (deepwater ports, extensive pipeline networks, central location in EU, trading expertise) are now being repurposed for renewable electricity interconnections and hydrogen pipelines. The Rotterdam port industrial complex, which grew huge on oil refining and storage, is now the planned site of Europe's leading hydrogen import terminals and CO₂ storage projects – indicating a transformation of the hub rather than the loss of it. This suggests a path-dependency: past policy choices and economic structures nudge the government to find ways to keep that infrastructure relevant (albeit handling new commodities) instead of letting it become stranded.

Comparatively, transformation of energy-intensive industries in the Netherlands has not historically meant cutting back these industries, but rather improving their efficiency and environmental performance. Dutch industry (chemicals, refining, steel, etc.) has been and remains a significant part of the economy. Past policies – like the 1989 National Environmental Policy Plan or various long-term agreements on energy efficiency in industry during the 1990s/2000s - focused on incremental change (efficiency gains, pollution control) rather than restructuring. It's only in the past decade, under mounting climate urgency, that talk of complete decarbonization by mid-century became mainstream. Even then, the approach mirrors historical consensual policy style: negotiate targets with industry, offer support, avoid outright confrontation that could lead to plant closures or relocation. In the Polder model tradition, the 2019 Climate Agreement was formulated in round-table sector platforms including industry representatives, resulting in agreed sectoral emission cuts but also agreements on government help (subsidies, infrastructure) to achieve them. This historical context explains why current policy may appear implicitly lenient or accommodating to industry – it's the continuation of a collaborative approach that values industrial contribution to the economy. It's also why the notion of simply phasing out certain energy-intensive operations gets little traction; historically the Dutch preference is to **innovate out of the problem** (e.g. find a technological fix) while keeping business activity intact.

In summary, looking at the historical arc: **the priority of being an energy trading nation is deeply ingrained**. The Netherlands has long profited from connecting producers and consumers across the globe (from colonial-era trade to oil/gas transit in the 20th century). That mindset naturally extends into the energy transition: the government implicitly prioritizes retaining that intermediary role. Meanwhile, **industrial**

policy has traditionally been about supporting key sectors, not shrinking them – now couched as making them sustainable. Thus, the current situation is a product of history: the government is inclined to believe it can *have its cake and eat it too* – remain an energy hub (only cleaner) and keep a strong industrial base (only greener). If there is any implicit hierarchy, history suggests that when push comes to shove, **economic/trade benefits have often overridden environmental considerations** (as seen in the gas hub investments). The question is whether the climate crisis forces a different outcome, or whether new energy forms simply allow the Netherlands to continue its historic role with a green veneer.

6. Stakeholder Perspectives

Influential stakeholders outside parliament—ranging from industry associations, port authorities, unions, local communities, independent experts, and environmental groups—shape the debate on Dutch energy policy in multifaceted ways. Their views encompass a broad spectrum that includes strong support for a transit/trading emphasis, urgent calls for industrial transformation, and concerns that current strategies might simply greenwash existing high-emission industries.

6.1. Industry Associations, Port Authorities, and Economic Analysts

Many industry associations and port authorities strongly favor a transit/trading emphasis. Organizations such as VNO-NCW (the employers' federation) and the Port of Rotterdam Authority argue that building hydrogen import terminals, CO₂ storage facilities, and other infrastructure is essential to secure jobs and promote economic growth. They warn that excessive regulation could "scare off" energy-intensive companies, thereby endangering the Netherlands' attractiveness as an energy hub. In parallel, many industry leaders and economic analysts applaud the government's efforts to transform the country into a future-proof energy hub. For example, René Peters, the director of gas technology at TNO, stresses that "the Netherlands" wants a prominent role as importeur and transit port of hydrogen in Europe", noting that the country is already working on international import chains for green hydrogen in partnership with the Ministry of Economic Affairs (Nederland wereldwijde hub voor waterstofimport, transport en opslag). Companies across the energy sector—including the Port of Rotterdam Authority, major engineering firms, and multinationals like Shell and Air Liquide—support initiatives that position the Netherlands as a hydrogen hub, CO₂ storage hub, or offshore wind power connector in Europe. They argue that being early movers in building transit infrastructure will attract investments, keep Dutch industry competitive, and provide a steady supply of lowcarbon feedstock, all while reinforcing the idea that clean molecules (like hydrogen) are necessary for decarbonizing hard-to-abate industries ([PDF] HYDROGEN POLICY IN THE NETHERLANDS ciep.energy).

6.2. Unions, Local Communities, and the Case of Tata Steel IJmuiden

In contrast, unions and many local communities are increasingly insistent that heavy industries must transition to cleaner operations—not only to protect jobs in the long term but also to improve public health. A notable example is Tata Steel IJmuiden, the country's largest steelworks and CO₂ emitter. Trade union FNV, in collaboration with GroenLinks-PvdA in late 2024, demanded that the government **fund Tata Steel's green transformation** or risk the collapse of Dutch steelmaking (Speed up support for Tata Steel or jobs will go: FNV and GL-PvdA - DutchNews.nl). As MP Joris Thijssen (GL-PvdA) emphasized, "We want to get rid of CO₂ pollution but we also want to continue making steel in this country," urging subsidies for Tata's shift from coal to hydrogen (Speed up support for Tata Steel or jobs will go: FNV and GL-PvdA - DutchNews.nl). Their argument is that an aggressive industrial transformation—such as building hydrogen-based steel production by 2030—is crucial to **save thousands of jobs and ensure a future for manufacturing**, rather than allowing industries to wither away or relocate abroad.

6.3. Environmental Groups and Independent Climate Analysts

On the flip side, environmental groups and independent climate analysts express serious concerns that the government's strategy is overly reliant on maintaining the status quo under a green gloss. A report by the NGO Milieudefensie (Friends of the Earth NL) contends that the Dutch state's vigorous push on hydrogen is "primarily a lifeline for the fossil industry" (Waterstofstandpunt 2024 .pdf). They highlight that a large share of current hydrogen use in the Netherlands is by oil refineries and fertilizer plants—sectors for which the government has **no clear phase-out plan**. In a truly fossil-free future, these industries would need to substantially downscale. By "greening" the hydrogen these sectors consume (for instance, replacing their gray hydrogen with green hydrogen), the government is effectively **helping big emitters like refineries continue operating under the label of sustainability** instead of questioning whether all of that capacity is

necessary. The Milieudefensie analysis bluntly states: "Now hydrogen is being greened for the benefit of big polluters, instead of the Netherlands recognizing that we cannot keep all energy-intensive industry here" (Waterstofstandpunt 2024 .pdf). Additionally, environmental stakeholders worry about lock-in risks—such as a heavy reliance on blue hydrogen (derived from natural gas with CCS) in the near term, or the possibility that vast import infrastructure could become underutilized if the hydrogen economy fails to boom as expected. They advocate for more focus on reducing energy demand and material use in industry, rather than merely substituting one fuel for another.

6.4. Nuanced Views from Independent Energy Experts and Researchers

Independent energy experts and researchers offer a nuanced perspective. A Clean Air Task Force-commissioned study acknowledged that the government harbors **clear ambitions for deep industrial decarbonization** but noted that policy tools tend to favor "established" fixes like CCS over innovative solutions such as green hydrogen and electrification (Dutch industrial decarbonization policy effectively supports CCS, but needs further push on low-carbon and green hydrogen to meet climate targets). This approach appears designed to secure short-term emission cuts to meet 2030 targets while leaving the core industrial structure largely intact—a bridging solution that keeps industry stable. Further, a 2023 investigative report by Platform Investico found that despite official 2050 "fossil-free" goals, Dutch heavy industry (including chemicals and refineries) internally projects significant continued use of oil and fossil feedstock even in 2050. In fact, refineries expect to still produce between 30–70% of current fossil fuel volumes, largely for export outside the EU (Nederlandse industrie rekent tot 2050 op aardolie | Investico Onderzoeksjournalisten). This suggests that many industry players anticipate only a partial transformation and plan to maintain a trading role—exporting fuels to regions with later phase-outs—which in turn aligns with a transit/trade strategy that keeps the infrastructure busy even as domestic consumption declines.

6.5. A Middle Path and the Role of Pragmatism

Notably, some pragmatists advocate a middle path. The new centrist party NSC, led by Pieter Omtzigt, supports the government's climate goals but with caution. NSC agrees that fossil fuel subsidies should be phased out; however, it prefers that such measures be coordinated at the EU level to maintain a level playing field (Netherlands' future climate policy unclear after far-right's shock election win | Clean Energy Wire). This reflects a view that the Netherlands should neither unilaterally impose excessive regulations that might drive industries away nor neglect the urgent need for climate action. Instead, a balanced approach is needed—one that addresses both economic competitiveness and environmental sustainability.

In Sum

The political spectrum in the Netherlands stretches from **transit-centric economic liberals**, who are primarily concerned with maintaining competitiveness and securing a robust energy hub, to **transition-focused progressives** and climate advocates who emphasize deep industrial transformation to protect jobs and public health in the long term. Over the past two years, a more unified left—exemplified by the combined efforts of parties like GL and PvdA—has explicitly championed industrial transformation, while right-wing voices have doubled down on opposing measures perceived as threatening industry or raising costs. Ultimately, while lobbying efforts and entrenched industry interests significantly influence the debate, shifting public attitudes and voter sentiment will determine the ultimate direction of Dutch energy policy. This ongoing tug-of-war between preserving existing industrial and transit structures and pursuing a leaner, more sustainable industrial profile sets the stage for the future of energy and economic policy in the Netherlands.

7. Strategic & External Influences

The Netherlands' energy policy priorities are also shaped by **geopolitical and EU-level dynamics**, which often reinforce the transit-hub focus. Strategically, the Netherlands finds itself at the intersection of major energy flows in Europe – a position it has leveraged for influence and economic gain. **European energy market liberalization** and integration (such as EU gas and electricity market policies) benefited the Netherlands, home to the Title Transfer Facility (TTF), which became Europe's largest gas trading hub (The Netherlands 2020 - Energy Policy Review). The Dutch government has thus had a stake in preserving open, liquid energy markets and infrastructure connectivity. With the EU now pivoting to new sources, the Netherlands is keen to remain that pivotal marketplace – for instance, by advocating for and aligning with EU hydrogen infrastructure plans. It is telling that the Dutch hydrogen ambitions (4 GW electrolysis by 2030, etc.) are **embedded in a broader NW European context** – the government frequently references importing from North Africa, the Middle East and supplying landlocked EU neighbors (Waterstofstandpunt 2024 .pdf)

(The Netherlands as a Future Hydrogen Hub for Northwest Europe). EU climate policies like the Green Deal and "Fit for 55" package set binding targets (e.g. for industrial use of green hydrogen by 2030) that the Netherlands must meet (Netherlands way off 2030 H2 targets: Government report). These external requirements push the government to act on industrial emissions, but they also provide a rationale to invest in transit capacity (since meeting EU hydrogen usage targets partly assumes cross-border trade of hydrogen). In short, EU climate goals pressure the Netherlands on industrial transformation, yet EU energy strategy simultaneously incentivizes countries to specialize (and the Netherlands has chosen to specialize in being a hub).

Geopolitical events have also influenced the balance. The 2022 Russian invasion of Ukraine and the subsequent crisis in European gas supply put the Netherlands in the spotlight: its ports and pipelines became key to bringing in alternative gas (LNG from the US, Qatar, etc.) to replace Russian flows for Europe. The government's rapid response – approving floating LNG terminals and maximizing throughput in gas interconnections – was a clear instance where **energy security imperatives temporarily trumped longer-term transition concerns**. This **reaffirmed the transit priority**: even as the Netherlands works to reduce gas in its own mix (e.g. phasing out Groningen field and residential gas heating in coming years), it stepped up as a gas gateway for neighbors in need. Such external pressures strengthen the argument within government that maintaining robust energy transport infrastructure is a strategic necessity. They also highlight a risk: in times of crisis, the Dutch government may extend the life of fossil infrastructure (albeit to help EU partners), potentially slowing the pivot to industrial decarbonization if, for instance, industries get cheaper gas or a rationale to delay switching technologies. However, it's worth noting the government also framed the LNG buildup as *temporary* and still kept longer-term climate commitments intact on paper.

Another external factor is the global market for clean tech and fuels. The Netherlands doesn't have vast renewable energy acreage (it is building lots of offshore wind, but it's a small, densely populated country), so it knows it must import renewable energy in forms like hydrogen or ammonia to meet all its industrial energy needs. This reality drives an external-facing strategy: securing deals with overseas suppliers (Australia, Chile, Namibia, Oman are all countries the Netherlands has engaged for future hydrogen imports) (Waterstofstandpunt 2024 .pdf). In doing so, the Netherlands is effectively positioning itself as the entry point for those global flows into Europe, not just a passive buyer. This is partly defensive (ensure Dutch industry has supply) and partly opportunistic (handle volumes that transit to Germany or Belgium and earn revenue/services from that). Geopolitics also plays a role in CCS: the North Sea is emerging as a CO₂ storage hub for European industry, and the Netherlands, along with Norway and the UK, is vying to offer storage to other countries. The Dutch government in 2024 explicitly discussed the import of CO₂ from other EU nations for storage and advocated in the EU for a framework to allow cross-border CO₂ transport (Kamerstuk 31793, nr. 273 | Overheid.nl > Officiële bekendmakingen). This shows an outward-looking stance – willing to integrate regionally in ways that reinforce the Netherlands as a service provider in the climate transition (here, storing others' carbon or supplying others with hydrogen). Such strategic moves indicate that external influences (the needs of neighboring economies, the emergence of a European hydrogen market, etc.) are pushing the Netherlands further into the role of facilitator and trader, which by extension keeps the hub priority high.

Finally, economic externalities like global competition and trade rules influence how the Netherlands prioritizes industry transformation. Dutch industry, especially chemicals and steel, competes globally. The government is wary that if it moves faster or more strictly than the EU as a whole, industries might relocate (carbon leakage). This concern means the **transformation of industry is calibrated with international pace**. When the EU moved to adopt a Carbon Border Adjustment Mechanism (CBAM) to protect low-carbon producers, the Netherlands supported it, as it levels the playing field and enables Dutch industry to invest in decarbonization without losing market share. But absent a global level playing field, the government implicitly prioritizes measures that **keep industry competitive** (like compensating high energy costs, offering subsidies) over any radical action. This is an external economic influence that tempers the speed of industrial change. In contrast, being a transit hub doesn't face the same competitiveness problem – in fact it thrives on open markets – so the government can charge ahead on hub infrastructure relatively unhindered by those worries.

8. Timeline & Milestones

Examining the timeline of Dutch energy transition initiatives and milestones suggests a sequencing that first cements the Netherlands' role in new energy networks, and gradually ramps up industrial emission cuts, potentially indicating a prioritization of the former in the near term. Key government roadmaps lay out ambitious targets for the 2030s and 2040s but with a notable pattern: infrastructure and

supply-side projects are front-loaded in the 2020s, while full industry decarbonization is targeted for the 2030–2050 period. For instance:

- By 2030, the Netherlands aims to have at least 4 GW of electrolysis capacity for green hydrogen (and strives for 8 GW by 2032) (Kabinet investeert fors in opschaling waterstof | Nieuwsbericht | Rijksoverheid.nl). It also expects to have a national hydrogen pipeline network connecting all major industrial clusters by around 2030 (Hydrogen law and regulation in Netherlands | CMS Expert Guides). These milestones are about building the capability to produce and move green hydrogen essentially the backbone of a hydrogen economy. Similarly, by 2030 the plan is to realize 10 Mt/year of CO₂ storage via CCS (Kamerstuk 31793, nr. 273 | Overheid.nl > Officiële bekendmakingen), meaning the CO₂ transport and storage infrastructure (Porthos, Athos, others) should be operational. These are enabling networks that have near-term deadlines.
- In contrast, the **industry sector's own transformation milestones are somewhat back-loaded**. The Climate Agreement sets a sectoral goal for industry of **reducing CO₂ by 14.3 Mt by 2030** beyond existing policies roughly a **-59% reduction in industrial emissions by 2030** relative to 1990 (Dutch industrial decarbonization policy effectively supports CCS, but needs further push on low-carbon and green hydrogen to meet climate targets). This is very steep and nominally sooner than many infrastructure projects fully mature. However, the **means to achieve this rely on those same infrastructure projects** (e.g. a large chunk of the 14.3 Mt is expected from CCS in oil/chemicals and from using hydrogen to replace part of the fossil fuels in refining). The KEV (Climate and Energy Outlook) projections by PBL initially showed that with then-current measures, the Netherlands was not on track for the 2030 target (The Netherlands 2024), prompting the extra climate package in 2023. If all goes well, the Netherlands might just reach 55% overall reduction by 2030 but that assumes *full deployment* of CCS and hydrogen in industry starting now (The Netherlands 2024). Notably, deep process changes (like new production routes in chemicals or steel) are often slated for the 2030s. For example, Tata Steel's conversion to hydrogen-based steelmaking is expected around 2030. Many chemical plants foresee major shifts closer to 2040, since assets are long-lived and will turn over only once before 2050.

This sequencing means that the 2020s are largely about laying groundwork (regulations, pilot projects, infrastructure build-out). The Multi-Year Program for Climate Fund investments (2024–2030) shows heavy funding in 2024–2025 for hydrogen and infrastructure, with later tranches supporting industrial uptake (The Netherlands 2024). The government's National Energy System Plan (concept) outlines a vision to 2050 where by the 2040s the energy-intensive industry is running on renewable energy and feedstocks, but to get there, the 2020s focus on electrifying the power supply (renewables boom) and setting up hydrogen and heat networks. In essence, the transformation of industry is dependent on the success of the energy-carrier transition – first ensure plenty of clean energy is available (and can be imported/exported), then industry will switch over. This could be interpreted as implicitly prioritizing the transit/supply side initially, under the assumption that industrial decarbonization will naturally follow when those resources are in place.

Another telling element of the timeline is what is **not scheduled for early action**. There are no official milestones for phasing out specific industrial activities before 2030 (e.g. no plan that "by 2030, no more oil refining for export"). Instead, refineries and petrochemical plants have 2050 as the horizon for "fossil-free," and even that is conditional (climate neutral production could theoretically include continued fossil usage with CCS). The only exception was in electricity generation (the Netherlands set 2030 as the end of coal power, forcing its last coal plants to either close or convert). But for industry, 2030 milestones are mostly about emission volumes, not what is being produced. This contrasts with the very concrete interim goals for being a **hydrogen hub by 2030** (e.g. having import terminals ready, pipelines connected, gigawatts of electrolyzers built). Additionally, the government's international MOUs (memoranda of understanding) on energy import/export often have target dates: for instance, a deal with Chile or Namibia might aim for first hydrogen shipments by, say, 2027 or 2028. These create external timelines that drive domestic action on the trading infrastructure.

Overall, the **sequence of initiatives** does suggest that **maintaining and evolving the energy trade network is addressed early as a prerequisite**, whereas the full transformation of industrial processes is a longer game. The risk, some analysts point out, is that if the supply-side infrastructure is delayed or global conditions shift, the industrial decarbonization could stall – which is why calls are increasing for parallel efforts on demand reduction and innovation *within* industry, not just waiting for hydrogen/CCS saviors. The timeline to 2050 is tight, and each five-year period will reveal whether the government recalibrates priorities or stays the course. So far, the milestones achieved (offshore wind rollout, LNG capacity expansion, CCS project FIDs) indicate **success in the hub-building aspect**, while industrial emissions have only modestly

declined and need a sharper downward trajectory in the next few years to meet the 2030 goal (The Netherlands 2020 - Energy Policy Review) (The Netherlands 2024). This disparity in progress could be interpreted as evidence that **the implicit prioritization of transit infrastructure has indeed been stronger** to date than the concrete on-site transformation of industry.

Conclusion

In conclusion, the Netherlands' energy policy exhibits a nuanced but discernible lean towards preserving and reinventing its role as an energy transit/trading hub, potentially overshadowing the pace and scope of transforming its energy-intensive industries. The government's official stance is to do both – achieve climate neutrality and remain an energy gateway – and it has earnest policies for industrial decarbonization. However, when we analyze commitments, rhetoric, and resource allocation, a pattern emerges: initiatives that reinforce the Netherlands as a crucial node in international energy flows are pursued vigorously and early, while industrial transformation is often couched in longer-term aspirations with significant reliance on those very flows materializing.

The **government's language** and partnerships trumpet the Netherlands as a future hydrogen hub and a steward of Europe's energy security, indicating an embedded mindset of being a **trading nation first**, **even in the green era**. Financially, billions are poured into hydrogen import infrastructure, ports, and CCS – tools that allow domestic industry to continue operating (with lower emissions) and anchor the country's place in global supply chains. Meanwhile, **tough decisions on restructuring industry** (such as scaling down petroleum refining or petrochemicals if clean alternatives lag) are largely deferred or avoided. Industrial decarbonization is encouraged through subsidies and market mechanisms, but always with a view to maintaining industrial competitiveness and presence in the Netherlands.

Stakeholder input reinforces this implicit priority: industry and government are in broad alignment to "green the economy" without shrinking it, whereas environmental voices question if the strategy is too focused on accommodating industrial incumbents (via imported hydrogen and CCS "fixes") at the expense of more fundamental change. The historical inclination to capitalize on trade and avoid deindustrialization clearly informs today's approach.

That said, it's not a black-and-white case of neglecting industry transformation – rather, the **transit hub strategy is seen as the vehicle to deliver industrial transformation**. The risk is that this approach bets on future technologies and international supply lines to do the heavy lifting of decarbonization, potentially underestimating what might be needed to internally reform industrial processes and reduce demand. If those bets pay off (e.g. abundant green hydrogen arrives, CCS works at scale), the Netherlands could indeed achieve **green industry and remain an energy hub**, fulfilling both priorities. If not, the current implicit prioritization might leave the country with world-class import/export infrastructure but still-high industrial emissions or stranded high-carbon assets.

In essence, the Dutch government's energy transition strategy implicitly prioritizes securing the Netherlands' role in the new energy economy – as a transit and trading linchpin – and assumes this will enable the transformation of its industries. This ordering is reflected in policy focus and timing. The coming decade will test whether this dual track can deliver the deep industrial emission cuts required or whether a recalibration is needed to put industrial transformation on more equal footing with the enthusiastic hub-building. The evidence so far – from official plans and outside analyses – suggests the hub role has a slight edge in practice, woven into the fabric of policy in a way that often takes precedence, albeit under the banner of doing everything together.

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