



Green innovation policies: a literature and policy review

An effective and efficient energy transition requires two ingredients: pricing activities that are bad for the climate and stimulating innovation in green technologies. Unpriced environmental damage and path dependency put green innovation at a disadvantage compared to innovation in general.

This report explores how governments can contribute to green innovation. It provides an overview of the literature on green innovation policies. It further briefly reviews green innovation policy in the Netherlands.

CPB Background Document

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Summary in Dutch

Voor een effectieve en efficiënte energietransitie zijn er volgens de economische theorie twee ingrediënten nodig: zowel het correct beprijzen van activiteiten die slecht zijn voor het klimaat als het stimuleren van innovatie in groene technologieën, oftewel technologieën die koolstofarmer en schoner zijn dan ‘grijze’ (koolstofrijkere en vuilere) technologieën.

Dit rapport verkent hoe overheden kunnen bijdragen aan groene innovatie. Het geeft een overzicht van de literatuur over hoe beleid de ontwikkeling van nieuwe groene, duurzame technologieën kan bevorderen en versnellen. Het laat daarbij zien dat twee typen argumenten een rol spelen in het denken over groen innovatiebeleid: marktfalens en missies. Beide argumenten kunnen een onderbouwing geven voor de sturing van technologische verandering richting groene technologieën. Vervolgens biedt het rapport een korte beschouwing van het groene innovatiebeleid in Nederland.

Groene innovatie verschilt in een aantal opzichten van innovatie in het algemeen. Ten eerste betalen de baten van innovaties in groene technologie zich onvoldoende uit, voor zover uitstoot van broeikasgassen en schade aan het milieu niet (volledig) zijn ingeprijsd. Ten tweede zet het optreden van padafhankelijkheid groene innovatie op achterstand; de bestaande basis van kennis en innovatie bij grijze technologieën maakt dat innovatie daar winstgevender kan zijn. Ook zijn infrastructuur en regelgeving vaak afgestemd op bestaande grijze technologieën. Ten derde onderscheidt groene innovatie zich door de gerichtheid op specifieke – groene – doelen. Hierdoor is bij groene innovatie niet alleen de ontwikkeling van nieuwe technologie, maar ook de brede toepassing ervan belangrijk: groene doelen kunnen pas worden bereikt als de groene technologieën en producten op grote schaal worden toegepast.

We onderscheiden vier fasen in het proces van groene innovatie en bespreken per fase de geschikte beleidsinstrumenten. Het rapport besteedt ook kort aandacht aan meer algemeen beleid dat een effect heeft op groene innovatie, zoals regulering, beleid rond infrastructuur en CO₂-belastingen. Met de lessen uit het literatuuroverzicht in het achterhoofd, gaan we vervolgens in op de belangrijkste innovatiebeleidsmaatregelen in Nederland.

In de eerste fase van groene innovatie (fundamenteel onderzoek) bestaat overheidsingrijpen vooral uit bekostiging van onderzoekinstellingen en universiteiten, en onderzoekssubsidies. Deze fase is technologisch het meest onzeker en kent de grootste marktfalens, dus overheidsingrijpen is hier het meest gerechtvaardigd.

In de tweede fase (pre-commercieel) is de rol van de overheid om te zorgen voor gunstige randvoorwaarden voor bedrijven en het oplossen van mogelijke financieringsproblemen, zodat zij lang genoeg kunnen overleven om de stap te maken naar levensvatbaarheid op de markt. Beleidsmaatregelen moeten zorgen voor voldoende liquiditeit; subsidies lijken in deze fase meer efficiënt dan voordelige leningen. Op winst gebaseerde innovatieprikkels zoals een lagere vennootschapsbelasting (bijvoorbeeld de innovatiebox) zijn waarschijnlijk niet effectief voor beginnende innovatieve bedrijven, omdat dergelijke bedrijven vaak hoge kosten en lage opbrengsten hebben. Het is van groot belang om te zorgen voor ondersteunende financiële mogelijkheden, omdat de onzekerheid nog steeds groot is en er vaak een tekort aan risicokapitaal is. Overheidsgaranties, directe investeringen en door de overheid gesteunde durfkapitaalfondsen in deze tweede fase kunnen helpen. Wel dienen deze instrumenten behoedzaam ingezet te worden om onnodig gebruik te beperken. Bedrijven die in nieuwe technologieën investeren kunnen gebruikmaken van ingehouden winsten, maar liquiditeit en toegang tot kapitaalmarkten blijven doorgaans beperkt.

In de derde fase (productmarkt) concurreren groenere producten en technologieën met grijze. De rol van overheden is om een brede toepassing van deze groenere producten en technologieën te stimuleren, als ze

een missie van een netto-nul uitstooteconomie willen bereiken. Adoptiesubsidies (subsidies die het voordeliger maken om groenere producten en technologieën te gaan gebruiken) zijn hiervoor nuttig, maar deze moeten wel zorgvuldig worden ontworpen. Bijvoorbeeld, instrumenten die de initiële kosten verlagen (zoals directe subsidies die de prijzen verlagen) werken beter voor huishoudens dan instrumenten die de levensduurkosten verlagen, zoals belastingaftrek en energiebesparing. De overheid kan in deze fase ook innovatie stimuleren door ervoor te zorgen dat de institutionele omgeving (financieel, regelgevend, infrastructuur etc.) klaar is voor de energietransitie. Standaardisatie kan ook de adoptie bevorderen, maar het moet technologisch neutraal zijn om te voorkomen dat we blijven hangen in ondermaatse technologieën (*lock-in*) en om verdere innovatie aan te moedigen.

Een portfolio van instrumenten lijkt optimaal. Mislukkingen moeten hierbij wel ingecalculeerd worden. Regelmatige evaluaties en transparantie helpen beleidsmakers bij het vinden van de meest doelmatige instrumenten, zodat ze tijdig kunnen bijsturen. Zulke inzichten zijn makkelijker op te doen als het beleid wordt ontworpen om evaluaties mogelijk te maken. Bijvoorbeeld, tevoren nadenken over data-eisen en rapportage, kan evalueren eenvoudiger maken.

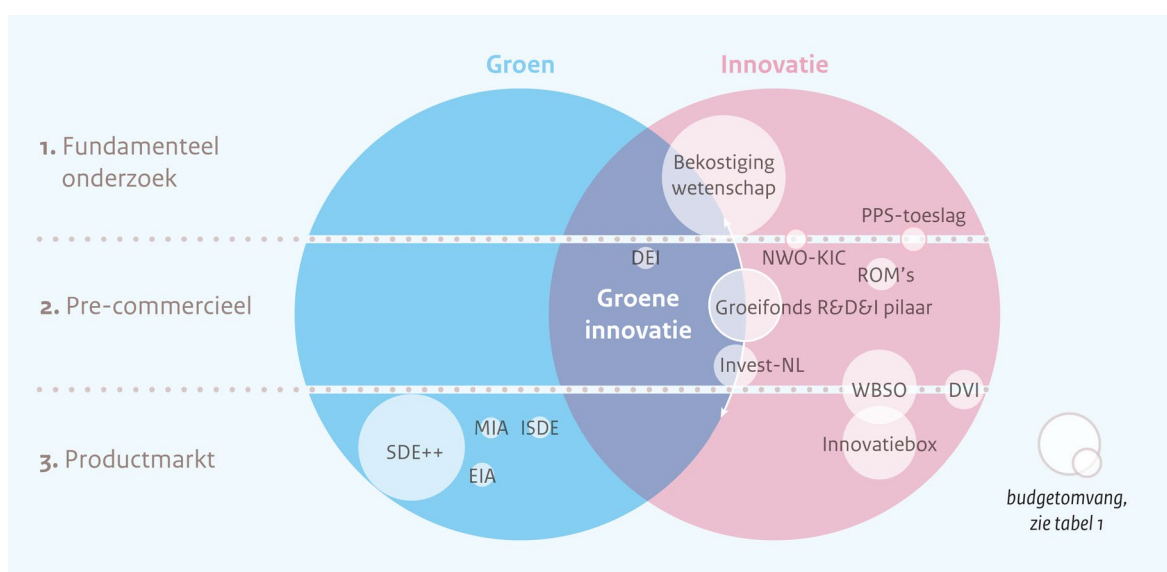
Algemene toepassing is de vierde en laatste fase van groene innovatie. Deze wordt bereikt als groene goederen en diensten de standaardoptie in de markt zijn en niet alleen maar concurrenten voor grijze goederen en diensten. In deze fase is de technologische onzekerheid grotendeels weggenomen en zijn de *kennisspillovers* beperkter dan in eerdere fasen. Wanneer groene goederen en diensten de standaardkeuze zijn, is onbeprijste milieuschade ook kleiner dan in eerdere fasen, waardoor er aanzienlijk minder reden is om in te grijpen.

In Nederland bestrijken beleidsinstrumenten alle fasen van innovatie, waarbij grotere budgetten worden uitgetrokken voor fundamenteel onderzoek (fase 1) en de productmarkt (fase 3). De totale onderzoek- en ontwikkel (o&o-)uitgaven komen overeen met het Europese Unie (EU) gemiddelde, maar zijn lager dan in Duitsland en Denemarken. De literatuur geeft geen duidelijke richtlijnen over de optimale o&o-uitgaven of de verdeling ervan over innovatiefases, maar Nederland zou ruimte kunnen hebben voor meer o&o-uitgaven in fase 2, de pre-commerciële of vroege ontwikkelingsfase.

Fundamenteel onderzoek wordt vooral gefinancierd via de bekostiging van universiteiten en subsidies waarom wordt geconcurrereerd. De literatuur suggereert dat dit waarschijnlijk effectieve instrumenten zijn om innovatie te bevorderen.

De pre-commerciële of vroege ontwikkelingsfase is het minst vertegenwoordigd (naar budgetomvang). De literatuur suggereert dat overheidsinterventie in die fase effectief kan zijn, dus er zou ruimte kunnen zijn voor meer middelen om nieuwe ideeën, pilots en demonstraties in groene technologieën aan te moedigen.

Figuur 1 Gestileerde weergave van innovatiebeleidsinstrumenten in Nederland, die prikkels geven voor groene activiteiten (links), innovatie in generieke activiteiten (rechts) en innovatie in groene activiteiten (intersectie) (budgetten boven € 100 miljoen).



De huidige milieu- en innovatie-instrumenten zouden beter kunnen worden afgestemd op de bestaande strategische missies, zoals het terugdringen van de broeikasgassen met 95% tegen 2050 of de EU-doelstelling om tegen 2050 klimaatneutraliteit te bereiken. Klimaatbeleid kan, bijvoorbeeld via het beprijzen van CO₂-emissies, enkele belemmeringen voor groene innovatie wegnemen. Ook zou innovatiebeleid meer gericht kunnen worden op het (door)ontwikkelen en opschalen van groene technologieën.

De omvangrijkste regelingen in Nederland behandelen groene innovatie niet als een doel, maar eerder als een bijproduct. Instrumenten zoals de Stimulering duurzame energieproductie en klimaattransitie (SDE++) betreffen vooral adoptiesubsidies en richten zich niet direct op de ontwikkeling van nieuwe groene technologieën. Andere instrumenten, zoals de belastingaftrek bij de Milieu-investeringsaftrek (MIA) en de Energie-investeringsaftrek (EIA), beperken zich tot de toepassing van specifieke technologieën, waardoor de prikkel beperkt is om nieuwe *knowhow* te ontwikkelen.

Er zijn in Nederland ook negatieve prikkels voor groene innovatie: de beprijzing van CO₂-intensieve productieprocessen is in diverse sectoren laag; bovendien lijken de huidige regels en regulering aanzienlijke impliciete subsidies te verstrekken aan fossiele brandstoffen. Dit vertraagt de energietransitie.

De Nederlandse innovatieregelingen met de grootste budgetten zijn generiek en stimuleren dus niet specifiek groene technologieën. De huidige regels weerhouden bedrijven er niet expliciet van om innovatieregelingen zoals de innovatiebox of de Wet Bevordering Speur- en Ontwikkelingswerk (WBSO) te gebruiken voor grijze innovatie. Het effect van sommige impliciete subsidies voor grijze technologie kan worden verzacht door specifiek groene technologie te stimuleren of expliciet grijze technologie uit te sluiten van overheidssubsidies. Het afstemmen van de innovatieprikkels op de klimaatdoelen van Nederland kan synergie creëren tussen de beleidsinstrumenten en de energietransitie bespoedigen.

Tot slot blijft internationale afstemming een belangrijk thema voor groen innovatiebeleid. Investerings in groene technologieën door ontwikkelde economieën kunnen leiden tot positieve overloopeffecten en de groene transitie voor alle landen versnellen. Vanuit een wereldwijd economisch perspectief is het realiseren van een significante kostenreductie van groene technologieën van het grootste belang. Grootschalige onderzoeksprojecten en voortdurende internationale dialoog blijven van vitaal belang.

Executive summary

An effective and efficient energy transition requires two ingredients, according to economic theory: correctly pricing activities that are bad for the climate and stimulating innovation in green technologies, that is, technologies which are lower-carbon and cleaner than 'brown' (higher-carbon and dirtier) technologies.

This report explores how governments can contribute to green innovation. It provides an overview of the literature on how policies can promote and accelerate the development of new green, sustainable technologies. It shows that two types of arguments play a role in thinking about green innovation policies: market failures and missions. Both arguments can provide a basis for directing technological change towards green technologies. The report then offers a brief review of green innovation policy in the Netherlands.

Green innovation differs from innovation in general in a number of respects. First, the benefits of innovations in green technology do not pay off sufficiently, insofar as greenhouse gas emissions and environmental damage are not (fully) priced in. Secondly, the occurrence of path dependency puts green innovation at a disadvantage; the existing basis of knowledge and innovation in brown technologies means that innovation can be more profitable there. Moreover, infrastructure and regulations are often geared to existing brown technologies. Lastly, green innovation distinguishes itself by the focus on specific – green – goals. As such, for green innovation, not only the development of new technology counts, but broad application is important too: green goals can only be achieved if the green technologies and products are adopted on a large scale.

We distinguish four stages in the process of green innovation and review the appropriate policy instruments for each stage. The report also briefly examines more general policies that have an effect on green innovation, such as regulation, infrastructure policies and carbon taxes. With the lessons from the literature review in mind, we then discuss the most important innovation policy measures in the Netherlands.

In the first stage of green innovation (fundamental research), government intervention mainly consists of funding for research institutes and universities, and research grants. This stage is the most technologically uncertain and has the greatest market failures, so government intervention is most justified here.

In the second stage (pre-commercial), the role of government is to provide favorable external conditions for companies and to solve possible financing problems, so that they can survive long enough to make the step to market viability. Policy measures must ensure sufficient liquidity; grants seem more efficient than low-cost loans at this stage. Profit-based innovation incentives, such as a lower corporate tax rate (e.g., patent boxes), are unlikely to be effective for innovative start-ups, because such companies typically have high costs and low returns. It is critical to ensure a supportive financial environment, as uncertainty is still high and there is often a shortage of venture capital. Government guarantees, direct investments, and government-backed VC funds can help in this second stage. However, these instruments should be used cautiously to limit unnecessary use. Companies that invest in new technologies can draw on retained earnings, but liquidity and access to capital markets are typically limited.

In the third stage (product market), greener products and technologies compete with browner ones. The role of governments is to stimulate widespread adoption of these greener products and technologies if they are to achieve a net-zero economy mission. Adoption subsidies (subsidies that make the use of greener products and technologies cheaper) are useful to this end, but they need to be designed carefully. For instance, instruments that lower upfront costs (such as direct subsidies that decrease prices) work better for households than instruments that lower lifetime costs, such as tax deductions and energy savings. The government can also encourage innovation in this stage by ensuring the institutional environment (financial, regulatory,

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Appendix

Table A.1 Missions comprising the mission-driven top sector and innovation policy in the Netherlands²⁴

Theme	Missions
Energy transition and sustainability	<ul style="list-style-type: none"> • Decrease national greenhouse gas emissions by 49% by 2030 and on the way to 95% by 2050, compared to 1990 • A fully CO₂-free electricity system in 2050 • A CO₂-free built environment in 2050 • A climate-neutral industry with re-usage of materials and products in 2050 • Emission-free mobility for people and goods in 2050 • A sustainable and fully circular economy in 2050, with a halving of raw materials use by 2030
Agriculture, water and food	<ul style="list-style-type: none"> • Reduction of raw materials and consumables in agriculture and horticulture by 2030. All end products and residual products to be brought to the highest possible value (circular agriculture) • Net climate-neutral system of agriculture and nature by 2050 • The Netherlands climate-proof and water-robust in 2050 • In 2030, the Netherlands will produce and consume healthy, safe and sustainable food; partners in the value chain, including farmers, will earn a fair price • A sustainable balance between ecological capacity and water management versus renewable energy, food, fishing and other economic activities. The balance must be achieved for marine waters in 2030 and in 2050 for rivers, lakes and estuaries • The Netherlands is and will remain the best protected and livable delta in the world, with timely, future-proof measures against manageable costs
Health and care	<ul style="list-style-type: none"> • In 2040, all Dutch people will live in good health for at least five years longer, and health differences between the lowest and the highest socio-economic groups will have decreased by 30% • In 2040, the burden of disease due to an unhealthy lifestyle and environment will have decreased by 30% • In 2030, care will be organized at least 50% more often in the own living environment, rather than in care institutions • In 2030, people with a chronic illness or lifelong disability will be able to better participate in society as they wish and are able to (+25%) • In 2030, the quality of life of people with dementia will have increased by 25%
Security	<ul style="list-style-type: none"> • In 2030, organized crime in the Netherlands will be too risky and poorly rewarding, due to greater insight into illegal activities and money flows • In 2035, the Netherlands will have the navy of the future. Able to respond flexibly to unpredictable and unimaginable developments • In 2030, the Netherlands will have operational space capacity for defense and security. • Cybersecurity. The Netherlands is able to secure economic and social opportunities of digitization • In 2030, the armed forces will work fully networked with other services and integrated with new technologies to be able to act faster and more effectively than the opponent • Supply and demand are brought together faster to implement short-cycle successful innovations. • In 2030, security organizations will collect new and better data, which makes them consistently one step ahead of threats • In 2030, the profession of safety professional will be one of the top 10 most attractive professions in the Netherlands

²⁴ Source: [link](#).

Table A.2 Horizon 2020 Technology Readiness Levels (TRLs)

Level	Description
TRL 1	Basic principles observed
TRL 2	Technology concept formulated
TRL 3	Experimental proof of concept
TRL 4	Technology validated in lab
TRL 5	Technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
TRL 6	Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
TRL 7	System prototype demonstration in operational environment
TRL 8	System complete and qualified
TRL 9	Actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

Table A.3 Overview of main innovation policy instruments in the Netherlands

Name	Description	Budget 2021 (€ mln)	Type	Basic research	Pre-commercial	Product market	Green activity	Innovation	Source
University funding, NWO, and Horizon EU	Financing of scientific research.	~4000 ²⁵	Subsidy	✓			Partly	Partly	Budget OCW, NWO, Rathenau
Stimuleren duurzame energieproductie en klimaattransitie (SDE, SDE+, SDE++)	Subsidy for renewable energy production and CO ₂ reduction.	2953 ²⁶	Subsidy			✓	Yes	No	Budget EZK
Wet Bevordering Speur- en Ontwikkelingswerk (WBSO)	Tax credit covering social security contributions of employees involved in R&D activities.	1443	Tax credit		✓	✓	No	Yes	Budget EZK
Innovatie box (patent box)	Lower corporate income taxes for income deriving from intellectual property.	1410	Lower tax rate			✓	No	Yes	Bedrijvenbeleidin beeld
Nationaal Groeifonds – R&D&I pillar	Public fund that provides subsidies to a variety of R&D and innovation projects, both green and non-green.	1354 ²⁷	Subsidy	✓	✓	✓	Partly	Partly	nationaalgroeifonds
Invest-NL	State-backed VC fund acting as impact investor. Strong focus on sustainable energy and circular economy.	500 ²⁸	State VC fund		✓	✓	Mostly	Yes	Dutch Parliament
Dutch Venture Initiative (DVI)	Public co-investment in venture capital funds that target small and medium-size enterprises.	403 ²⁹	Financing		✓	✓	No	Yes	Bedrijvenbeleidin beeld
Regionale Ontwikkelingsmaatschappijen (ROMs)	Regional development companies, investing in local companies active in energy transition and sustainability. 10% of budget goes to green projects.	271 ³⁰	Financing		✓		Partially	Partially	Bedrijvenbeleidin beeld

²⁵ In 2021, total basic university funding for research was approximately €2.3 billion and the NWO disbursed grants of about €1 billion in 2020. Similarly, the Horizon 2020 budget disbursed €4.5 billion to the Netherlands in the period 2014-2019, amounting to more than €700 million per year.

²⁶ This figure concerns the subsidy budget for the year 2021. In 2021, the SDE budget for the next 15 years was €5000 million.

²⁷ The total fund size is €20 billion planned to be used over a 5-year period, starting in 2021. For the first investment round for the subject R&D and innovation, a total of €1354 million has been used, of which €400 million being conditionally allocated, €121 million unconditionally allocated, and €833 million made as a reservation for projects that seem promising but require additional information; due to this last category, it is possible that the total funding for all subjects in 2021 will be below €4 billion ([link](#)).

²⁸ €500 million per year is budgeted for Invest-NL. Actual investment pledges amounted to €241 million in 2020 (Invest-NL, 2021).

²⁹ Total amount made available for two investment funds. Actual yearly investments can vary with availability of investment options and timing of promised investments.

³⁰ Total investment of ROMs in participation in 2020.

PPS-toeslag	Fiscal program stimulating private-public partnerships between companies and research institutes.	172	Subsidy	✓	✓		Partially	Yes	Budget EZK	
Energie-investeringsaftrek (EIA)	Tax credit for investments in sustainable energy and energy efficiency covered by the Environment list (<i>Milieulijst</i>).	149 ³¹	Tax credit			✓	Yes	No	Dutch Budget	
Demonstratie Energie- en Klimaatinnovatie (DEI)	Subsidy scheme for early-stage innovation in carbon capture, energy efficiency, renewable energy, CO ₂ reduction and local integration of large-scale wind and solar energy.	127	Subsidy			✓	Yes	Yes	RVO	
Investeringssubsidie duurzame energie en energiebesparing (ISDE)	Subsidy scheme for home insulation and sustainable energy.	124	Subsidy			✓	Yes	No	RVO	
NWO-instrumentarium voor het Kennis- en innovatieconvenant (NWO-KIC)	Financing of basic and practical research in public-private cooperation. Some calls target green innovation.	118	Financing	✓	✓		Partially	Yes	NWO	
Milieu-investeringsaftrek (MIA)	Tax credit for investments in goods and technologies covered by the Environment List (<i>Milieulijst</i>).	114	Tax credit			✓	Yes	No	Dutch Budget	
Versnelde klimaatinvesteringen industrie	Support investment in cost-effective reductions of CO ₂ emissions. Closer to an adoption subsidy.	82	Subsidy			✓	Yes	Mixed	Bedrijvenbeleidin beeld	
Regeling groenprojecten	Tax reductions for individuals who invest in green projects.	81	Tax reduction			✓	Yes	Yes	RVO	
MKB-Innovatiestimulering Regio en Topsectoren	Subsidy scheme to stimulate innovation for small and medium enterprises across regions.	66 ³²	Subsidy			✓	✓	No	Yes	Bedrijvenbeleidin beeld
Missiegedreven Onderzoek, Ontwikkeling en Innovatie (MOOI)	Subsidy scheme for cooperative integral projects on innovations supporting the Dutch Climate agreement.	55	Subsidy			✓	Yes	Yes	Budget EZK	
Innovatiekrediet	Innovation credit for companies with strong business case, but not attractive enough for banks.	45	Financing			✓	✓	No	Yes	Budget EZK
DKTI-transport	Subsidy for green innovations in the area of transport.	37	Subsidy			✓	Yes	Yes	RVO	

³¹ Total budget available in 2021; actual use may vary.

³² Granted subsidies in 2020.

Hernieuwbare energietransitie (HER+)	Subsidy scheme to reach the climate goals for 2030 in a more cost-effective way through innovative projects.	32	Subsidy	✓	✓	Yes	Yes	Budget EZK
Willekeurige afschrijving milieu-investeringen (Vamil)	Accelerated depreciation for investments that appear on Environment List (<i>Milieulijst</i>).	25	Accelerated depreciation		✓	Yes	No	RVO
Thematische Technology Transfer-regeling	Subsidy to encourage research organizations to cooperate in various sectors. Creation of funds that would provide risky capital for technology transfers.	24 ³³	Subsidy	✓	✓	Partially	Yes	Bedrijvenbeleidin beeld
Techleap.nl (formerly StartupDelta)	Government-sponsored mentorship and networking programme, with a small incubator.	18 ³⁴	Network	✓	✓	No	Yes	Bedrijvenbeleidin beeld
Topsector energiestudies industrie	Subsidy for feasibility studies of pilot or demonstration projects which cost-effectively reduce CO ₂ before 2030.	15.5	Subsidy	✓	✓	Yes	Yes	RVO
Small Business Innovation Research (SBIR)	Contest-oriented procurement initiative to encourage innovative solutions to government-posed problems.	12.7 ³⁵	Subsidy	✓	✓	Partially	Yes	Bedrijvenbeleidin beeld
Subsidie Topsector Industrie	Subsidy for companies that cooperatively research cheaper climate neutral or circular products or services to be used before 2030.	8.9	Subsidy	✓		Yes	Yes	RVO
Vroegefasefinanciering	Early-stage loan for innovative start-ups.	8.5	Financing	✓	✓	No	Yes	Bedrijvenbeleidin beeld
Systeemintegratie	Subsidy for R&D in new products and services that can keep the energy system safe, reliable and affordable.	3.8 ³⁶	Subsidy	✓	✓	Yes	Yes	RVO
Innovatie Attaché Netwerk	Network for sharing information about innovation.	n/a	Network	✓	✓	No	Yes	RVO
MVO Nederland	Network of companies interested in sustainability.	Project-funding	Network	✓	✓	Yes	Partially	mvonederland

³³ Budget for 2020. Up until end-2021, the scheme has been temporarily closed.

³⁴ Budget for the startup and scale-up agenda, which includes other initiatives and policies next to Techleap.nl.

³⁵ Tender budget for 2020.

³⁶ Budget for 2020. This subsidy scheme has been closed.

Table A.4 List of abbreviations

Abbreviation	Description
ARPA-E	Advanced Research Projects Agency–Energy
CEA	<i>Commissariat à l'énergie atomique et aux énergies alternatives</i> (Alternative Energies and Atomic Energy Commission)
CERN	<i>Conseil européen pour la recherche nucléaire</i> (European Council for Nuclear Research)
DARPA	Defense Advanced Research Projects Agency
DEI	<i>Demonstratie Energie en Klimaatinnovatie</i> (Demonstration energy and climate innovation)
DKTI-transport	<i>Demonstratie klimaat technologieën en -innovaties in transport</i> (Demonstrations of climate technologies and innovation in transport)
DVI	Dutch Venture Initiative
EIA	<i>Energie-investeringsaftrek</i> (energy investment deduction)
ESG	Environmental, Social, and Governance
EU	European Union
EU ETS	European Union Emissions Trading System
HER+	<i>Hernieuwbare Energietransitie</i> (Renewable energy transition)
ISDE	<i>Investeringssubsidie duurzame energie en energiebesparing</i> (investment subsidy for sustainable energy and energy savings)
ITER	International Thermonuclear Experimental Reactor
KfW	<i>Kreditanstalt für Wiederaufbau</i> (Credit Institute for Reconstruction)
KNAW	<i>Koninklijke Nederlandse Akademie van Wetenschappen</i> (Royal Netherlands Academy of Arts and Sciences)
MIA	<i>Milieu-investeringsaftrek</i> (environmental investments deduction)
MOOI	<i>Missiegedreven Onderzoek, Ontwikkeling en Innovatie</i> (Mission-driven research, development and innovation)
NWO	<i>Nederlandse Organisatie voor Wetenschappelijk Onderzoek</i> (Dutch Research Council)
NWO-KIC	<i>NWO-instrumentarium voor het Kennis- en innovatieconvenant</i> (NWO instruments for the Knowledge and Innovation Covenant)
PPP	Public-private partnership
PPS-toeslag	<i>Publiek-private samenwerking-toeslag</i> (public-private partnership subsidy)
PV	Photovoltaics
R&D	Research and development
R&D&I	R&D and innovation

ROM	<i>Regionale Ontwikkelingsmaatschappijen</i> (Regional development companies)
SBIR	Small Business Innovation Research
SDE	<i>Stimulering duurzame energieproductie en klimaattransitie</i> (Stimulus for sustainable energy production and climate transition)
SIB	State investment bank
SME	Small and medium-sized enterprises
TRL	Technology Readiness Level
US	United States
Vamil	<i>Willekeurige afschrijving milieu-investeringen</i> (Arbitrary depreciation of environmental investments)
VC	Venture capital
WBSO	<i>Wet Bevordering Speur- en Ontwikkelingswerk</i> (Tax credit for research and development)