



Rijksdienst voor Ondernemend
Nederland

From voluntary agreements towards energy savings obligations

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STREAMSAVE Final event
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Voluntary agreements (2006 – 2020)

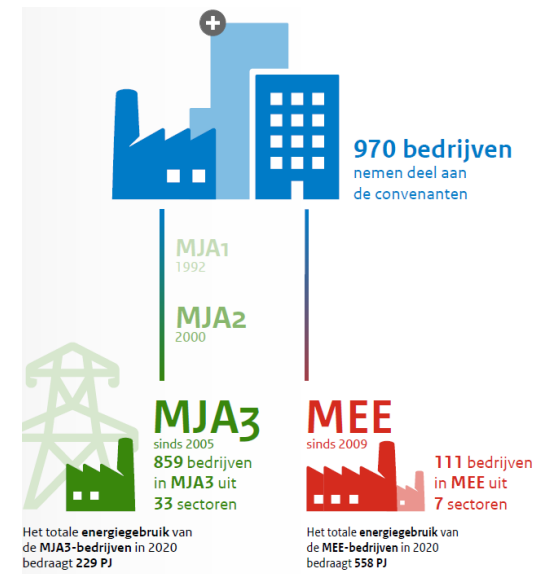
For many years the base of energy efficiency policy in industry in the Netherlands

1000 participants industrial and service sectors

Energy efficiency plans to be handed in and checked each 4 years

A yearly extensive monitoring report per participant

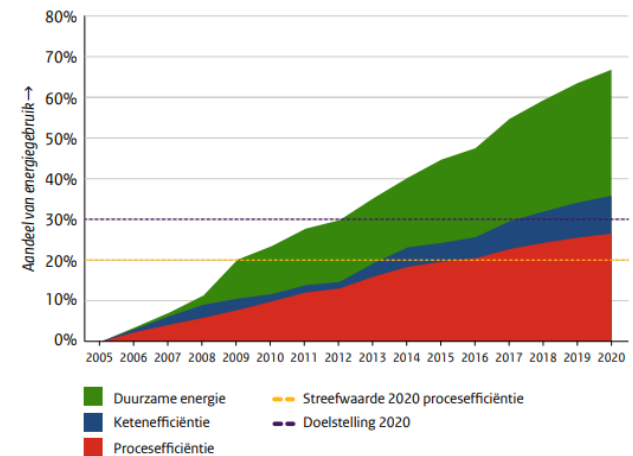
Sectoral knowledge exchange and support, and in some cases energy tax reduction



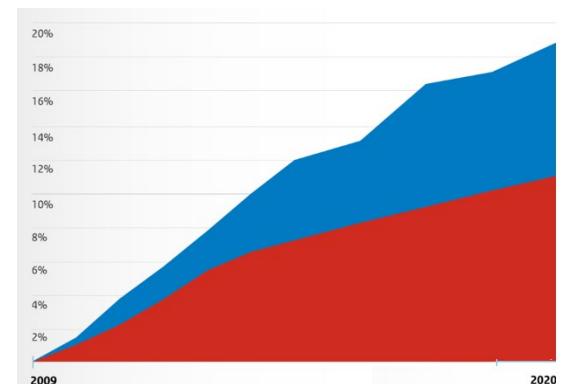


Voluntary agreements (results)

The cumulative targets of **MJA in 2020**: 20% proces efficiency
These targets were met with 27%.



No long-term target for **MEE**.
This agreement resulted in 12%
proces efficiency 2020.





Voluntary agreements in EED Art 7

Beleidsmaatregel	sector	2014	2015	2016	2017	2018	2019	2020
MJA	industrie	4,3	2,3	1,6	5,4	3,1	2,4	0,9
MJA	utiliteitsbouw	0,7	0,2	0,3	0,4	0,8	0,6	0,1
MEE	industrie	5,5	3,9	3,3	5,4	3,9	3,2	2,7
EIA	industrie	5,2	6,3	4,1	3,7	5,3	5,3	5,5
EIA	utiliteitsbouw	1,4	2,0	2,9	4,0	3,6	2,8	3,1
EIA	transport	0,3	0,1	0,1	0,1	0,7	0,1	0,5
mix-GO	huishoudens	8,1	9,0	11,6	11,1	11,7	10,7	15,1
mix-GO	utiliteitsbouw	2,5	2,7	3,9	3,4	3,0	3,8	7,8
Totaal (ongecorrigeerd voor overlap)		28,0	26,5	27,7	33,5	32,1	28,8	35,7
Correctie overlap		4,1	6,4	4,5	5,5	6,5	5,0	4,4
Totaal (inclusief correctie overlap)		23,9	20,1	23,2	27,9	25,6	23,8	31,4
Multiplifier (jaren)		7	6	5	4	3	2	1
Energiebesparing incl multiplier		167,5	120,5	116,2	111,8	76,7	47,6	31,4
Cumulatief		167,5	288,0	404,2	516,0	592,8	640,3	671,7

The voluntary agreements ensured well-monitored energy saving data, sufficient to enable overlap correction with energy savings of other instruments.

The Art. 7 EED target of 482 PJ for 2014-2020 was achieved.



Energy saving obligation

- 1993** included in law
- 2008** defined as all measures are obliged with a payback time <5 year
- 2013** it was agreed that enforcement must be done by local authorities (however difficult to implement)
- 2019** the **Information obligation** came into force
 - > Recognized checklists of measures for 19 sectors
 - > Financial support for local authorities
 - > 2019-jan.2022: 60.000 reports (out of 90.000) were submitted

Informatieplicht energiebesparing
Als u vanaf 50.000 kWh elektriciteit of
25.000 m³ aardgas (equivalent) per jaar verbruikt
Rapporteer uiterlijk **1 juli 2019** uw genomen maatregelen





2023: Further developments (I)

In 2023 the target group was enlarged with:

- EU ETS / energy intensive industries
- Permit holders
- Greenhouse horticulture

In the new target group a large saving potential is expected due to improved insulation, improved process control systems, heat recovery, optimizing electromotor systems, etc.

Scope is widened: next to energy savings, renewable production and electrification will be taken into account

Extra budget (56 million EUR) is available for enforcement of local authorities in period 2022-2026



2023: Further developments (II)

From 19 sectoral lists to 3 category lists: buildings, facilities, processes

G Gebouwmaatregelen	F Faciliteiten	P Procesmaatregelen
<ul style="list-style-type: none">A Energiebeheersysteem (EBS)B Isolatie van de schilC RuimteverwarmingD RuimteventilatieE Warm tapwaterF BinnenverlichtingG BuitenverlichtingH Zonnepanelen	<ul style="list-style-type: none">A PersluchtB StoomC AandrijvingenD ProductkoelingE GrootkeukenapparatuurF OvensG TerreinverlichtingH ZwembadI ServerruimteJ RoltrapK Zonnepanelen	<ul style="list-style-type: none">A NatlakspluicabinesB DrogenC ProcesbadenD ProcesapparatuurE ProceswarmteF ProceskoelingG VeehouderijenH Datacentrum

A 4 yearly **Research obligation** for large energy users on proces-related energy use (research obligation) (>10.000MWh or >170.000 Nm³)

From 2027 the maximum payback time will be stretched to 7 years



Other instruments for Industry and monitoring for EED Art 7(8)

EIA Energy investment tax deduction

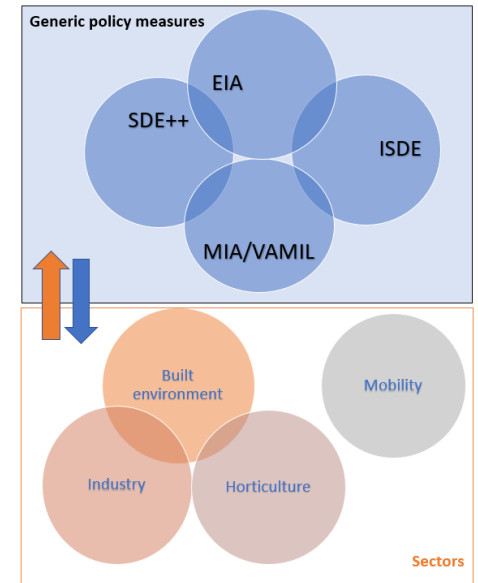
bottom-up data and assumptions on typical energy savings per technology

SDE++ Stimulating renewable energy production and climate transition

technical estimates used for both the realized and expected savings with data in the subsidy decision, production data is available

VEKI /DEI Acceleration for climate investments in industry & Demonstration Energy innovation

detailed project data in grant application is used



Including
overlap
correction



Energy saving obligation in monitoring for EED art. 7(8)

Until now, data is only available on the level of checklists: if an enterprise did take the measure, with little quantitative information.

From next round in december 2023 we intend to:

- Collect extra data to be able to calculate savings based on bottom-up data and assumptions
- Use assumptions in line with current methods for other instruments
- To make sure data is more suitable for deduplication in case of overlap with other instruments



Conclusions

Shift from voluntary agreements to energy saving obligation is expected to be impactful

A monitoring challenge: from relative extensive reports of 1000 voluntary participants to > 60.000 checklists with little quantitative data, how to collect essential data with the least administrative burden

Meanwhile, from other financial instruments quantitative data for EED Art 7(8) is collected, in most cases good quality so overlap correction is possible



Questions?



Back up:



Savings in 2021 (petajoules)

2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	totale besparing	cumulatief
									?		
								?	?		
							?	?	?		
						?	?	?	?		
				?	?	?	?	?	?		
			?	?	?	?	?	?	?		
		?	?	?	?	?	?	?	?		
	?	?	?	?	?	?	?	?	?		
31,5	31,5	31,5	31,5	31,5	31,5	31,5	31,5	31,5	31,5	314,7	314,7

Klimaatsector	2021
Landbouw	1,3
Industrie	13,4
Gebouwde omgeving	13,5
Mobiliteit	3,3
Totaal	31,5

	te besparen
huidige EED	924
voorgestelde EED	1.292
compromis EED?	1.347

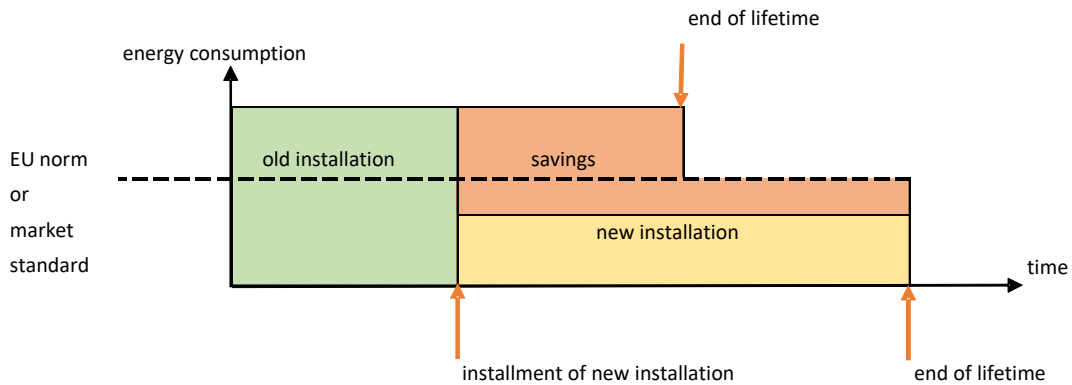


Figure 1: Schematic visualisation for determining energy savings in the case of early replacement



Tabel 4.1

Bandbreedte mogelijke bijdrage per sector aan de doelstelling voor artikel 7 van de EED in de periode 2021-2030

Sector	Petajoule (cumulatief voor de periode 2021 tot en met 2030)
Huishoudens	229-343
Diensten	266-323
Industrie	74-243
Verkeer en vervoer	61-100
Landbouw	0-27
Totaal	721-939