



Netherlands Enterprise Agency



IEA Task 37 Biogas Country Update Netherlands

Mathieu Dumont

Toowoomba November 2016



Feed Inn tariff SDE+ 2016

(first round, available budget 4 Biljon €)

(second round available budget 5 Biljon €)

Fase	Opening First round SDE+ 2016	Second round (sceduled for October)	Renewable Electricity and heat (€/kWh)	Renewable gas(€/kWh)* 1 Nm3 eq. 9,7 kWh
1	22 maart, 9.00 uur	nbn	0,090	0,064
2	29 maart, 17.00 uur	nbn	0,110	0,078
3	4 april, 17.00 uur	nbn	0,130	0,092
4	11 april, 17.00 uur tot 28 april, 17.00 uur	nbn	0,150	0,106

* De fasegrens hernieuwbaar gas is gecorrigeerd voor de bijdrage aan de duurzaamheidsdoelstelling (78,5%) en factor onderste/bovenste verbrandingswaarde Gronings aardgas (31,65/35,17).



Overview biogasproduction NL 2015

Type of biogas	production (TJ)	usage of produced gas (TJ)			final use of biogas (TJ)		#plants
		CHP	Green Gas (2)	External use & Mobility	Electricity	Heat	
landfill	793	518	188	86	165	206	
sewage sludge	2316	2177		140	743	1205	80
co-digestion (1)	5207	5207			1979	2239	97
Others (municipal waste)	5517	2698	2337	483	1245	3055	50

(1) installed capacity 133 MWe; gross E production 550 Mln kWh; average full load hours 4169

(2) total production 80 Mln Nm³

source: CBS publication september 2016

Input co-digesters 2,5 biljon kg (70% animal manure = 3% of total amount produced; input from energycrops 30 miljon kg = 1% massbalance)

Biogasproduction from animal manure = 31%



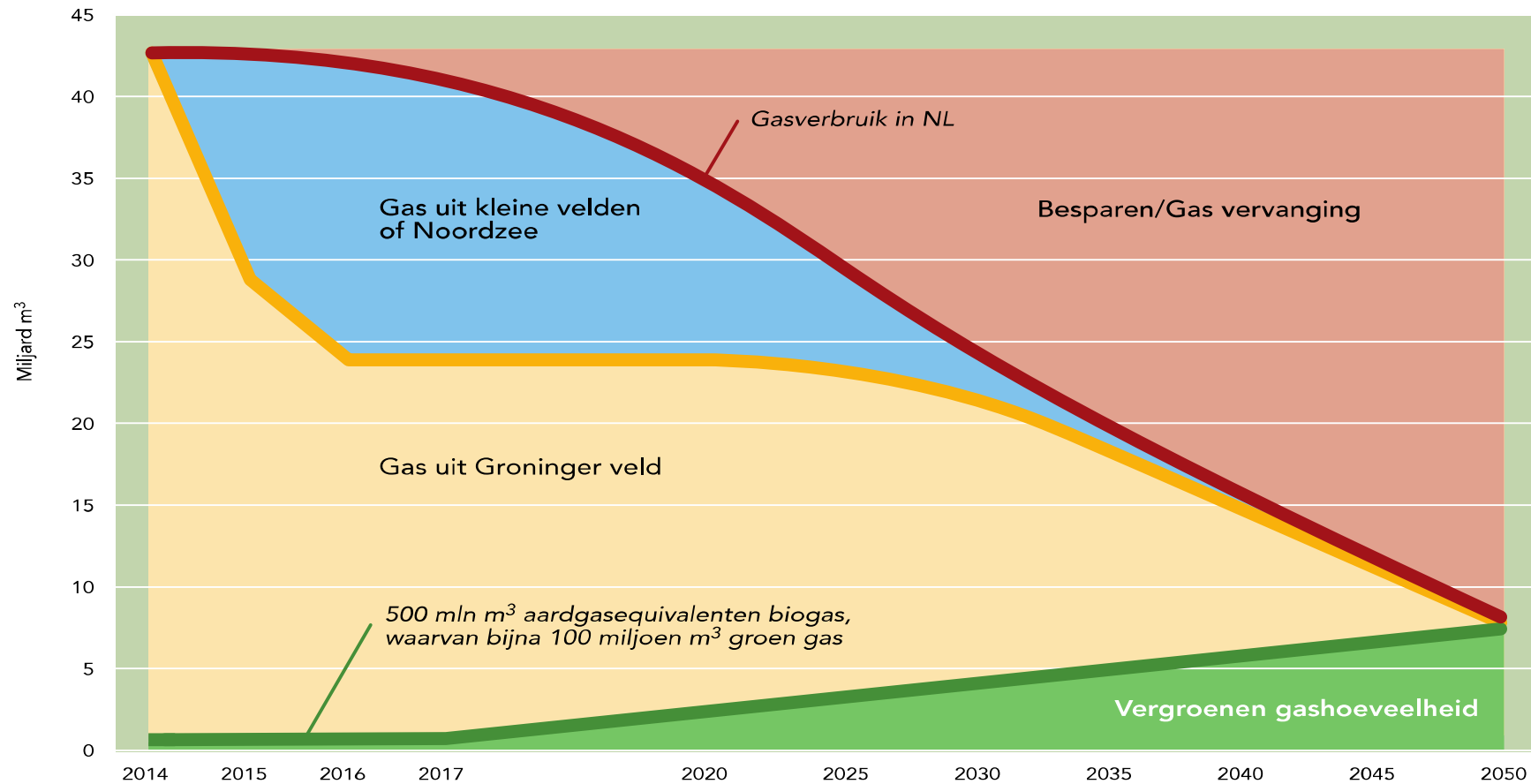
Long term: Energy report Ministry of Economic Affairs: Transition to sustainability

Focus on 2050 with an integral approach:

- CO₂-emission poor energysystem
- Save, secure and affordable
- Focus on economical development and innovation



Gastransition in the NL up to 2050





Impact of gas transition in NL up to 2050

- Big focus on energy saving
- Big focus on replacement of fossil gases to renewable gases
- Remaining gas demand just available as feed stock options (chemical industry)
- Replacement of remaining heat demand through other renewable energy options.



Short Term

Development of farm scale Manure digestion

- Electricity production with biogas in CHP
- biomethane production and grid injection for bigger farms
(≥ 13 kton manure)



Jumpstart mono manure digestion at farm scale:

start up with 200 plants with support from SDE+ system; 12,5€ct/kWh – 12 years: gross feed inn tarif 150 milion €

Initiated by milkprocessing industry

