



NL Agency  
Ministry of Economic Affairs,  
Agriculture and Innovation

## Country Up-date Biogas Production in the Netherlands

IEA-Bioenergy Task 37 meeting Nov 15th 2012

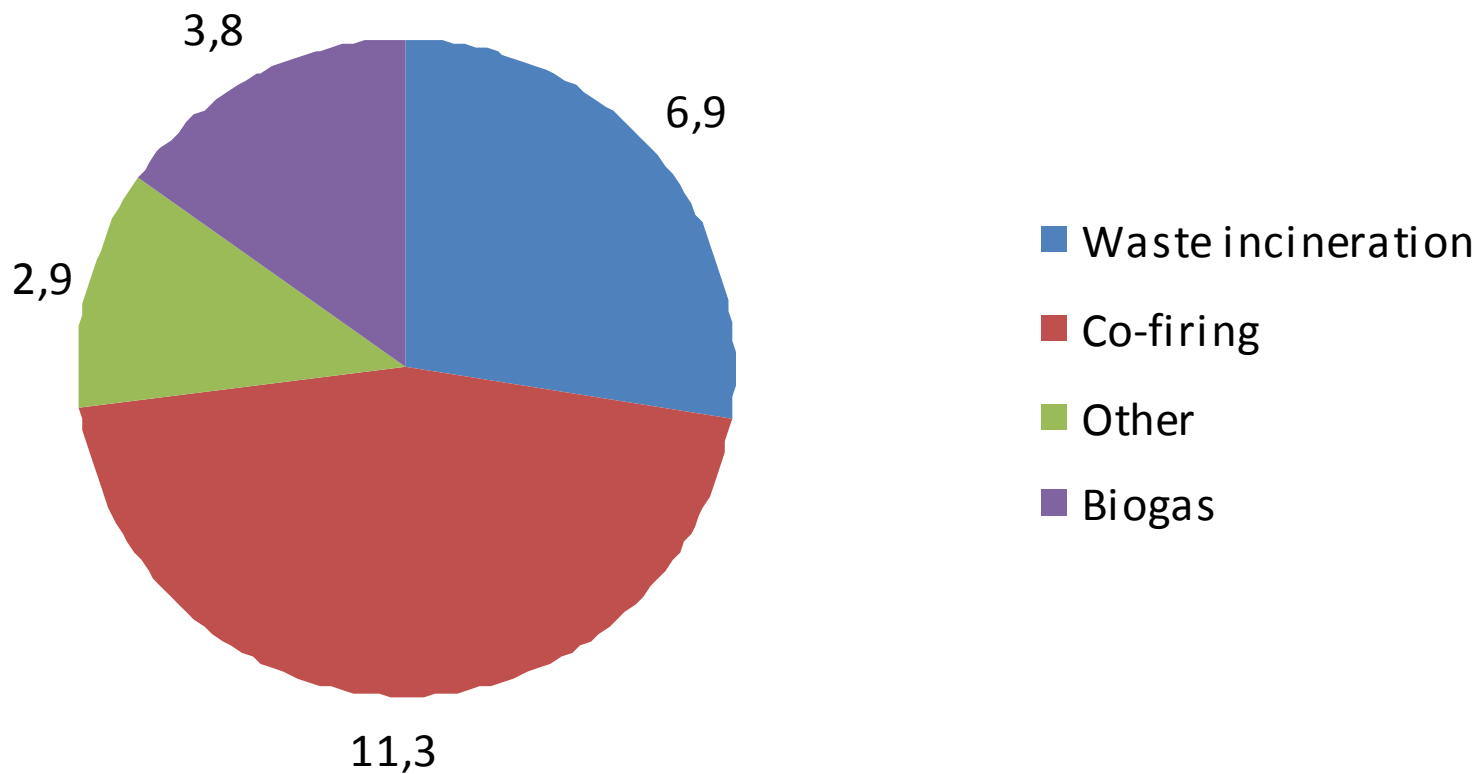
Mathieu Dumont  
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» Focus on sustainability,  
innovation and international



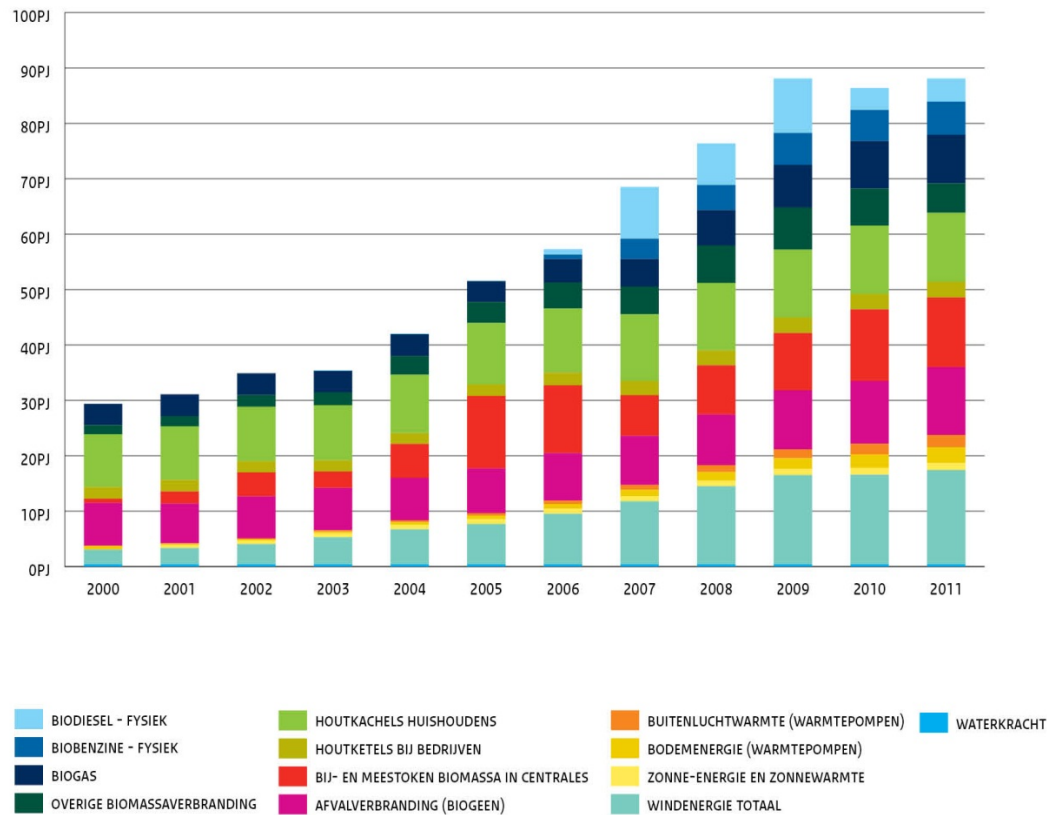


## Gross final electricity production with bioenergy in 2011 (PJ)



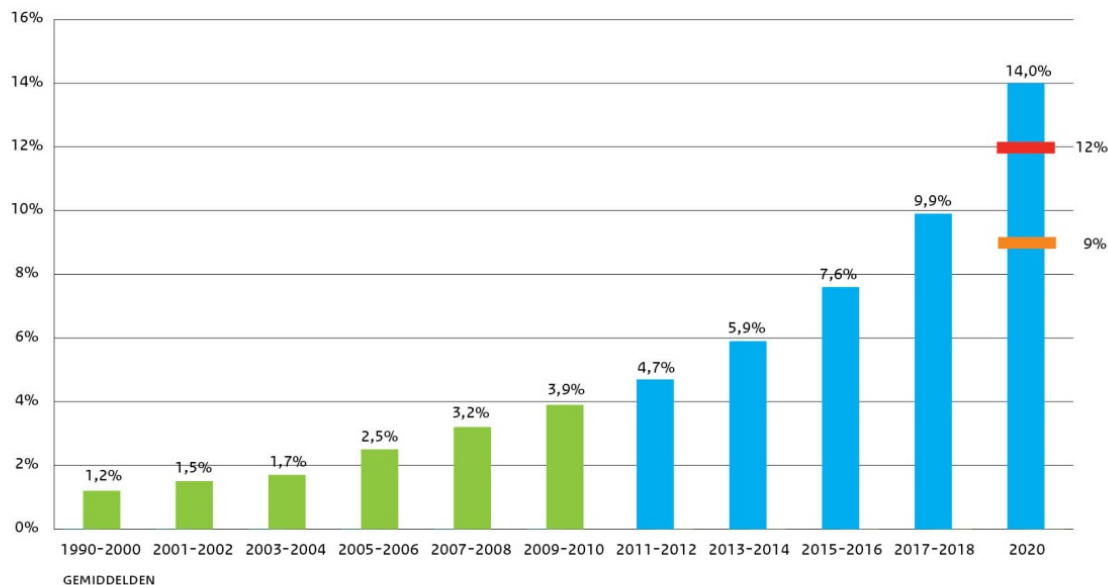


# Contribution of different Renewable Energy (RE) options to RE production in NL





# Realisation and projection RE production NL



Realised Projected Estimated achievable PBL/ECN (low) Estimated achievable PBL/ECN (high)



## Developments in RE framework

- 51 digesters applied successfully for extra feed-in tariff for additional heat use from installed CHP.
- New top-sector approach with focus on Green Gas development with focus on innovation:  
Several projects are in commissioning phase on subjects concerning:
  - pretreatment of feedstock of digesters (thermo hydrolyses)
  - gasification (with solid biomass as feedstock)
  - supercritical gasification of liquid biomass
  - gas quality measurement in case of gas grid injection
  - small scale digesters
  - recovering nutrients from digestate



## Operational green gas projects

municipality	company	used biomass	Installed E-power (MW)	Greengas production [Nm <sup>3</sup> /h]
Tilburg	Attero location Tilburg	landfill	0	300
Wijster	Attero location Wijster	landfill	0	500
Collendoorn	Stortplaats Slagenweg	landfill	0	25
Nuenen	Carbiogas BV-Gulberg Nuenen	landfill	0,31	750
Groningen	Attero location Groningen	municipal waste		700
Witteveen	Bouwhuis Biovergisting B.V.	co-digestion	1,59	200
Zwolle	Natuurgas Overijssel (ROVA)	municipal waste	0	420
Mijdrecht	BioGast Sustainable Energy BV-RWZI Mijdrecht	sewage sludge	0	40
Beverwijk	BioGast Sustainable Energy BV-RWZI Beverwijk	sewage sludge	0	250
Well	Ecofuels	organic waste	2,4	300
Dinteloord	Suikerunie	organic waste	0	1,100
Tims	Mts. Schaap	co-digestion	0,67	206
Rijsenhout	De Meerlanden B.V.	municipal waste	0	375
Middenmeer	HVC	municipal waste	0	600
Bunschoten-Spakenburg	A v/d Groep en Zonen BV	fish residues	0,63	690
				<b>7,106</b>



New Green Gas project “Schoteroog” with cryogenic biogas upgrading;  
input biogas from landfill and sewage sludge  
Grid injection (8 bar gas grid) and possibilities for fuel applications liquid  
biogas/biomethane (LBG)  
capacity: 100 Nm<sup>3</sup>/h





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