



NL Agency
Ministry of Economic Affairs,
Agriculture and Innovation



Country update Biogas Netherlands

IEA-Bioenergy Taskmeeting task 37
Istanbul; April 2011

Mathieu Dumont
NL Agency

» Focus on sustainability,
innovation and international



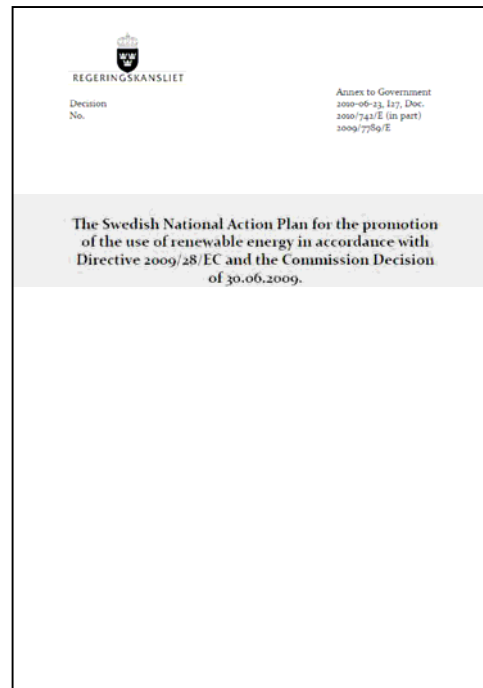
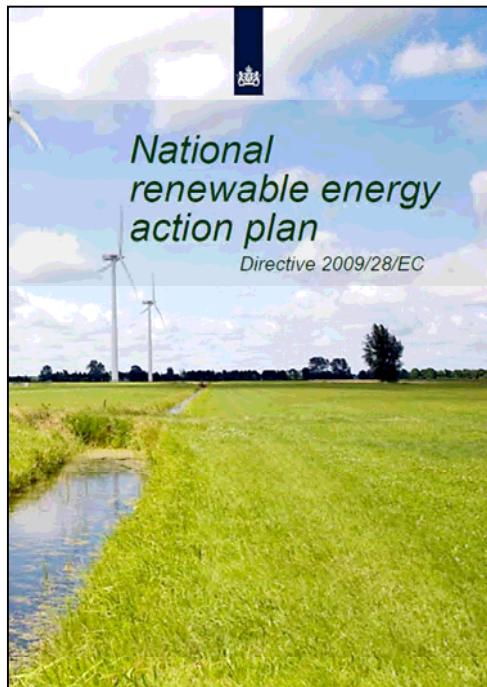
Content

- RED en Action plans
- State of the art in biogasdevelopment
- Grid injection
- Ongoing projects



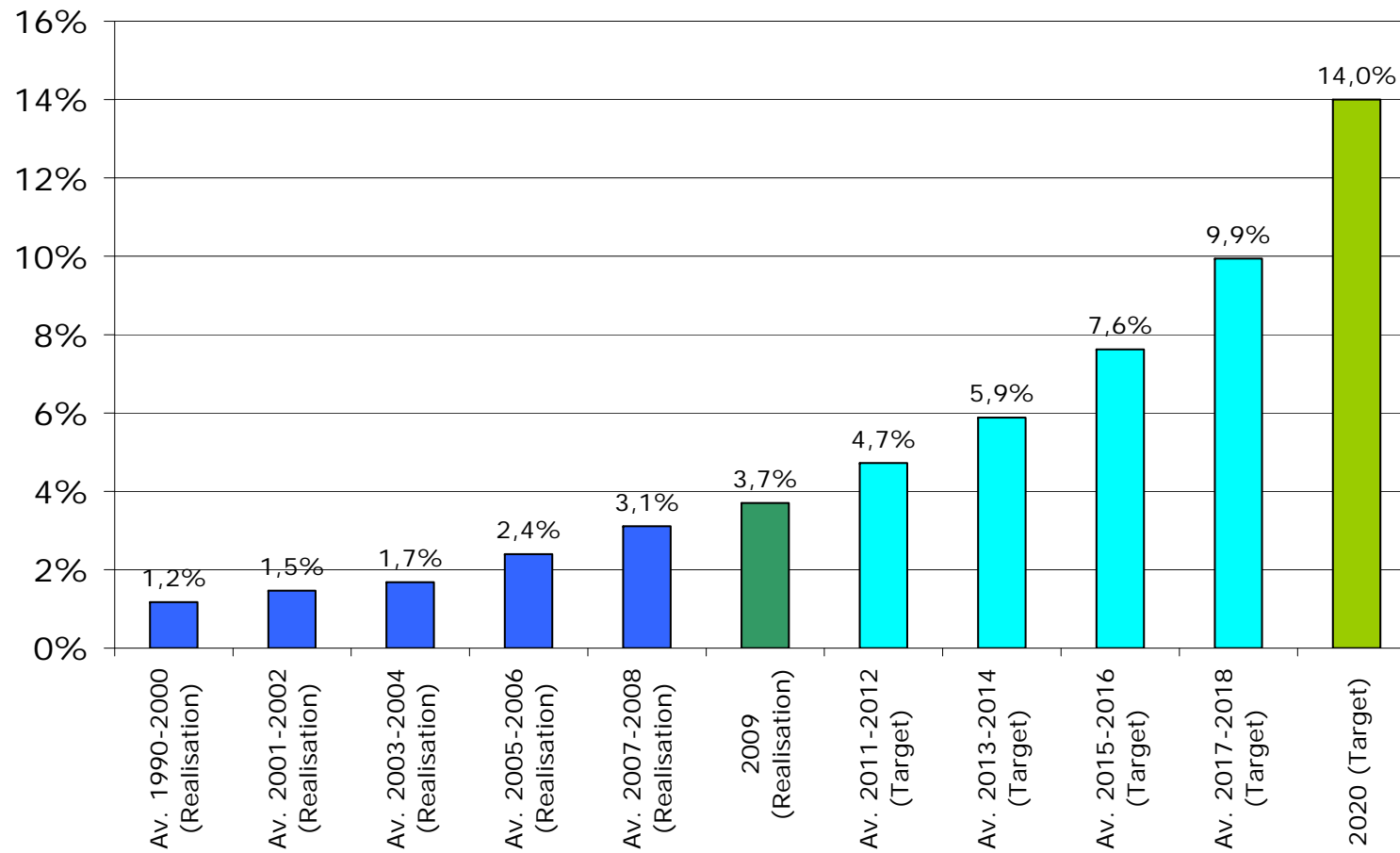
Renewable Energy Transparency Platform

- Forecast documents
- Action plans
- Sustainability communication



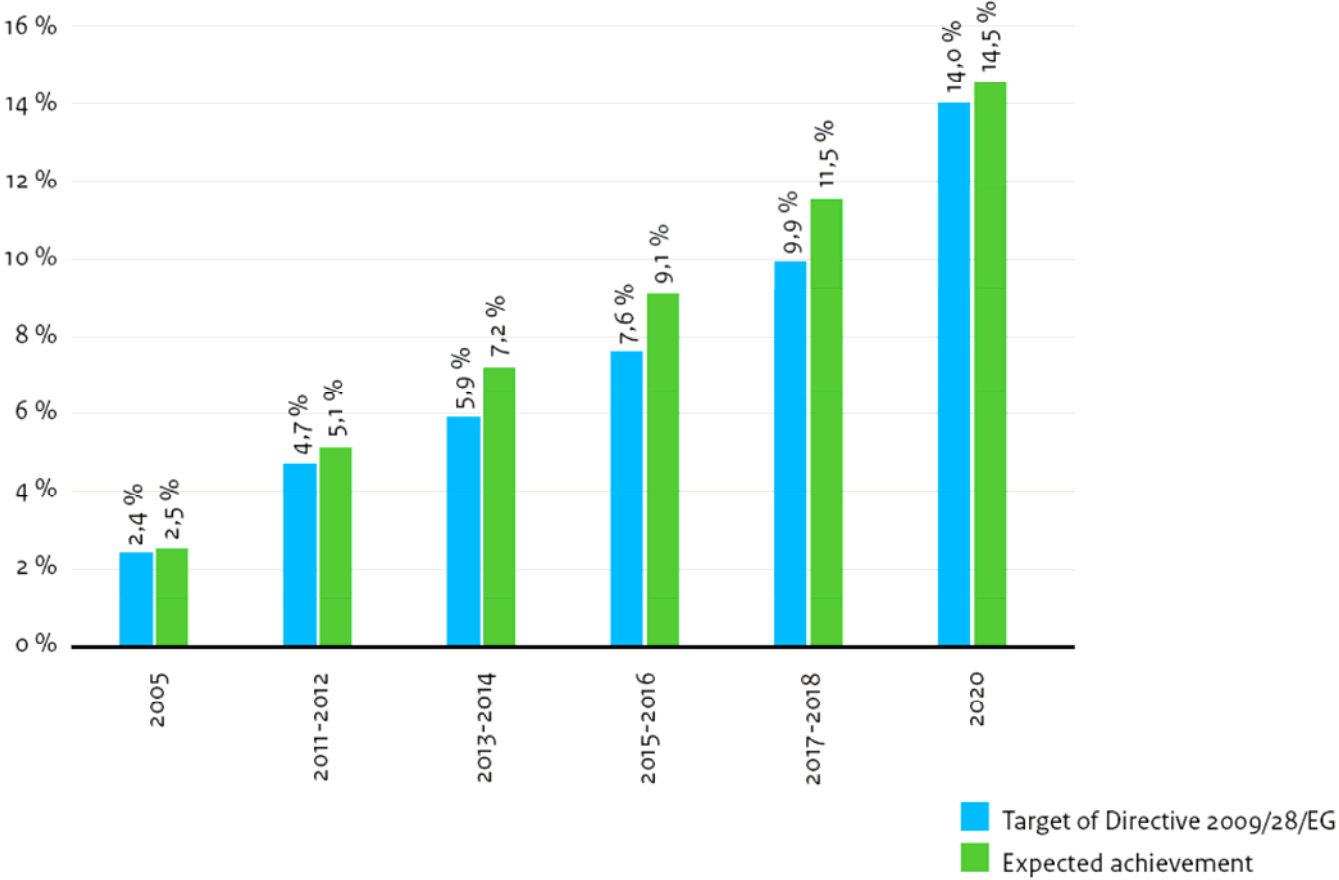


Share Renewable Energy The Netherlands



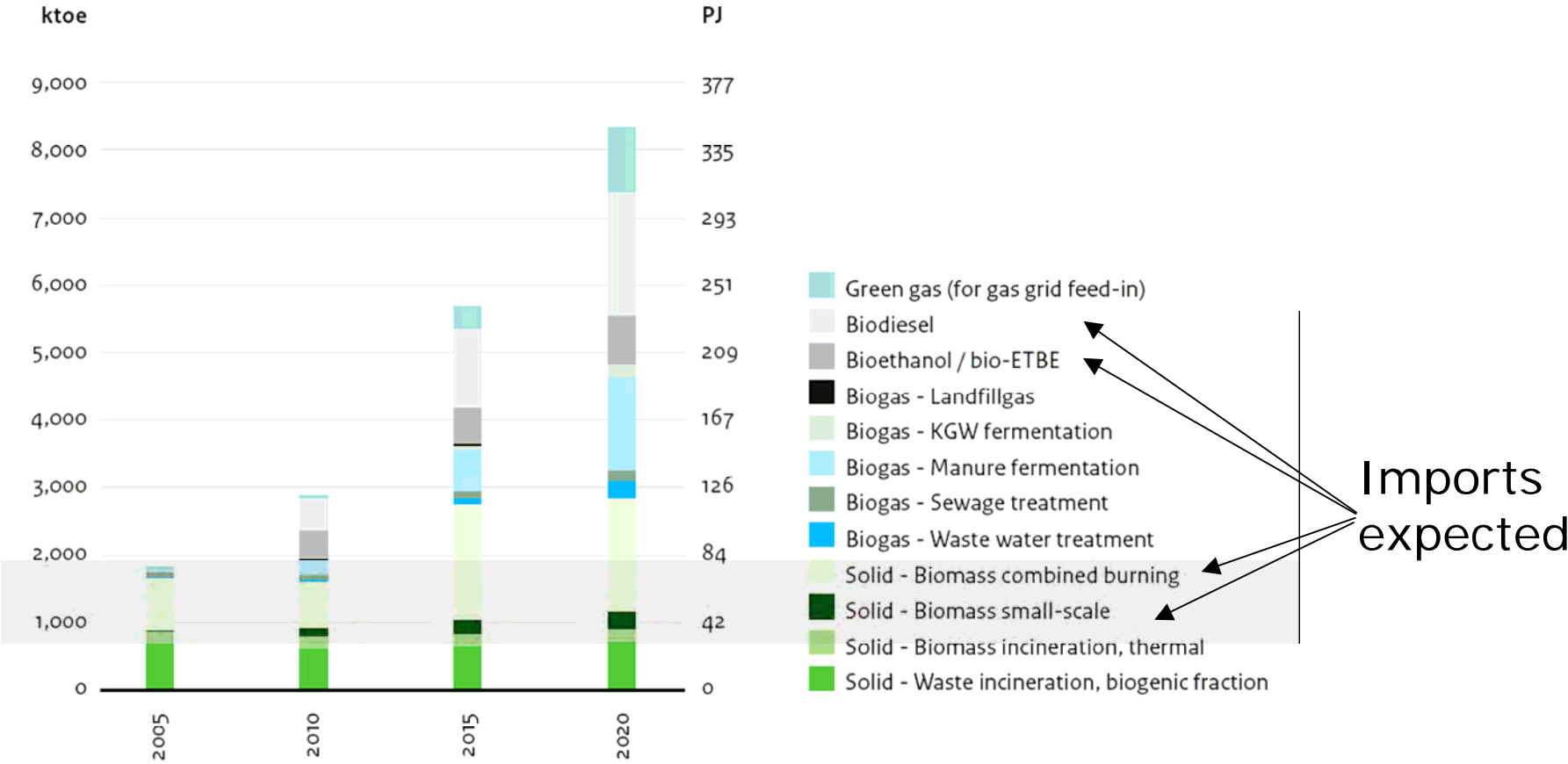


Target and expected achievement the Netherlands



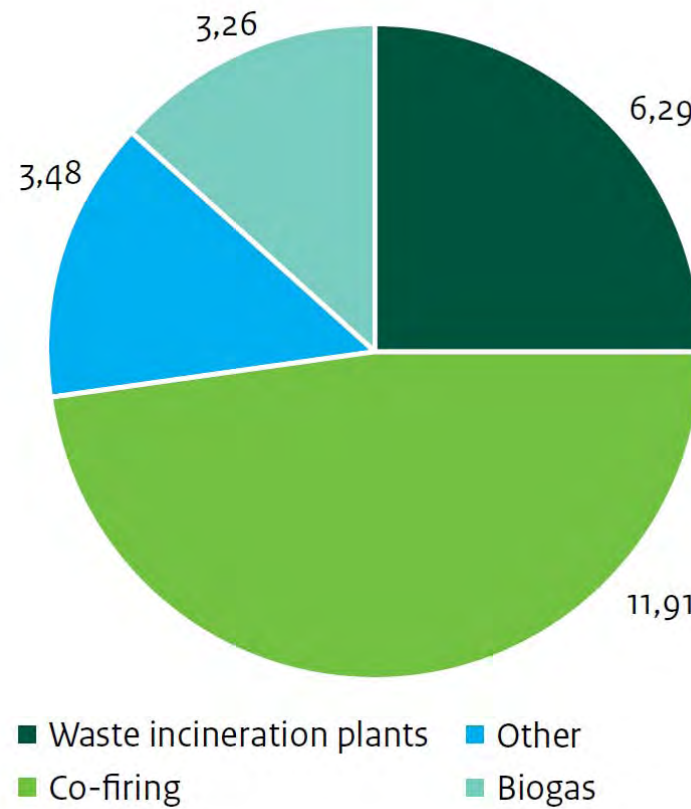


Assessments of dutch biomass demands (nReap)



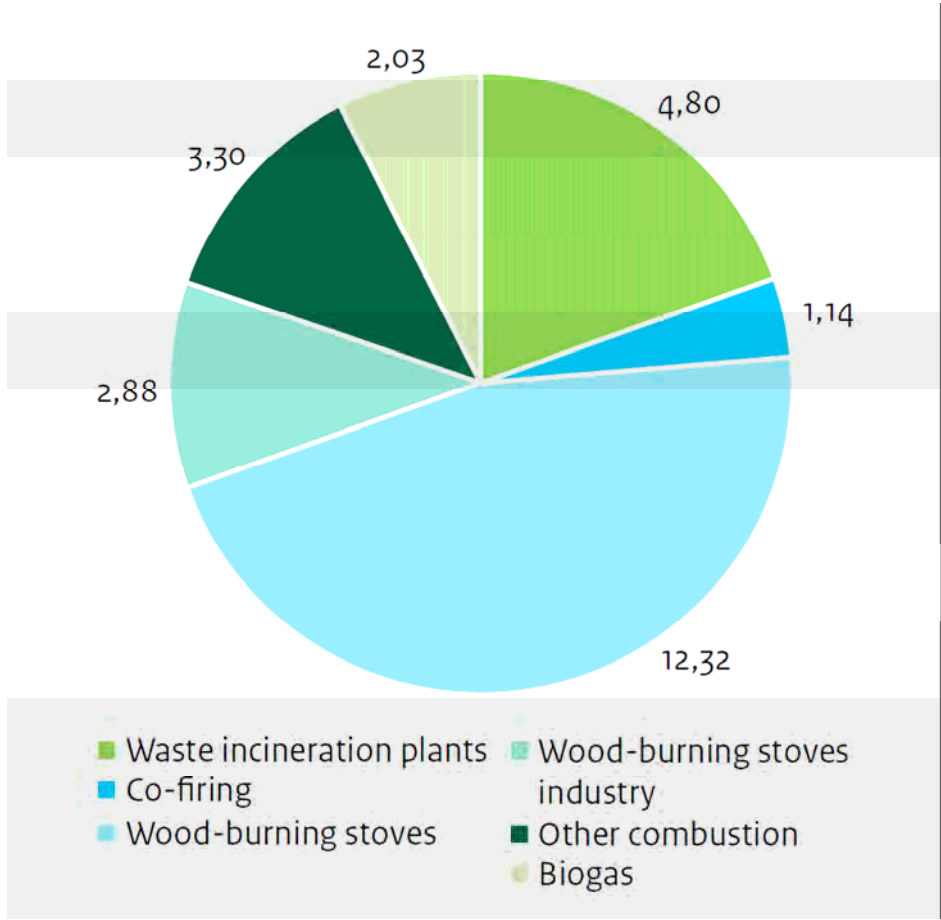


Gross final electricity production with bioenergy in 2010 (PJ)





Gross final heat production with bioenergy in 2010 (PJ)





Overview bio-energy projects: www.b-i-o.nl





Biofuel: Filling stations (www.fuelswich.nl)

TANKSTATIONS NEDERLAND

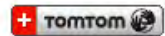
- Alle brandstoftypen
- Alle brandstoftypen
- Aardgas / Groen gas
- Biodiesel
- Bio-ethanol
- Nog te realiseren

gas tankstations online.

- pdf file: Download de pdf file met groen gas tankstations.

TOMTOM

Voeg de locatie van alle tankstations direct toe aan je tomtom door de knop hieronder te gebruiken.



- ov2 file: het is ook mogelijk een losse ov2 file te downloaden en later op uw tomtom te plaatsen. Deze bevat alle type tankstations.



De tankstations op deze kaart bieden **naast de reguliere brandstoffen** ook de aangegeven **schone brandstoffen** aan



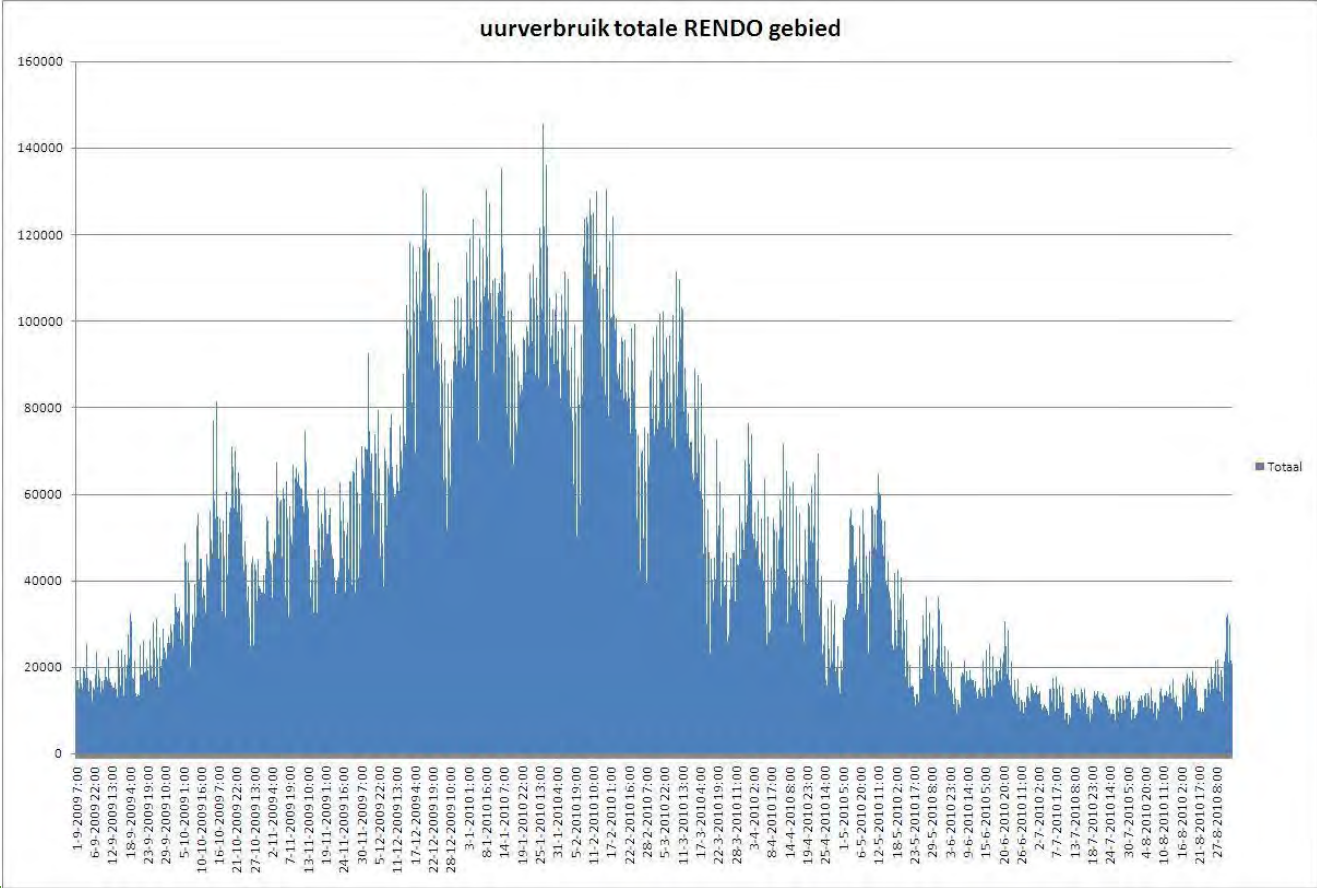
Actual Green Gas production

municipality	company	used biomass	Installed E-power (MW)	Greengas production [Nm3/h]
Tilburg	Attero locatie Tilburg	landfill		300
Wijster	Attero locatie Wijster	landfill		500
	Stortplaats Slagenweg	landfill		25
Groningen	Attero locatie Groningen	organic waste		700
Witteveen	Bouwhuis Biovergisting B.V.	co-digestion	1,59	200
Zwolle	Natuurgas Overijssel (ROVA)	organic waste	0	420
Mijdrecht	BioGast Sustainable Energy BV-RWZI Mijdrecht	sewage sludge	0	40
Beverwijk	BioGast Sustainable Energy BV-RWZI Beverwijk	sewage sludge	0	80
Nuenen	Carbiogas BV-Gulberg Nuenen	landfill	0,31	750
Bunschoten-Spakenburg	A v/d Groep en Zonen BV	fish residues	0,63	690
				3705

Yearproduction capacity 30 miljon Nm3; in direct preparation 70 miljon Nm3/y based on subsidyschemes Capacity from 40 Nm3/h up to 2000 Nm3/h)

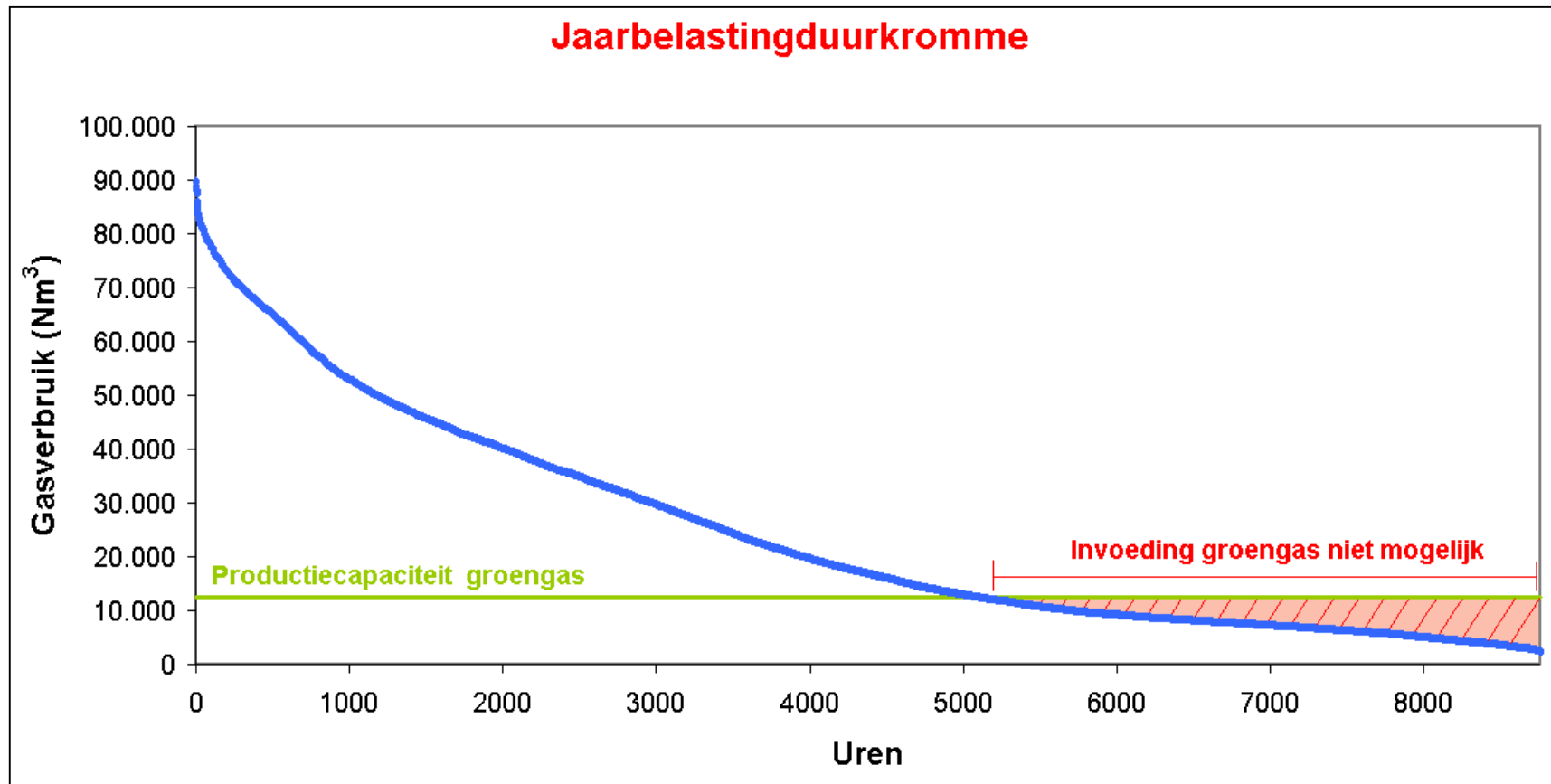


Gasdemand over a year in the Rendo gridregion; 12% natural gasreplacement needs a constant feed inn capacity of about 4500 Nm³/h



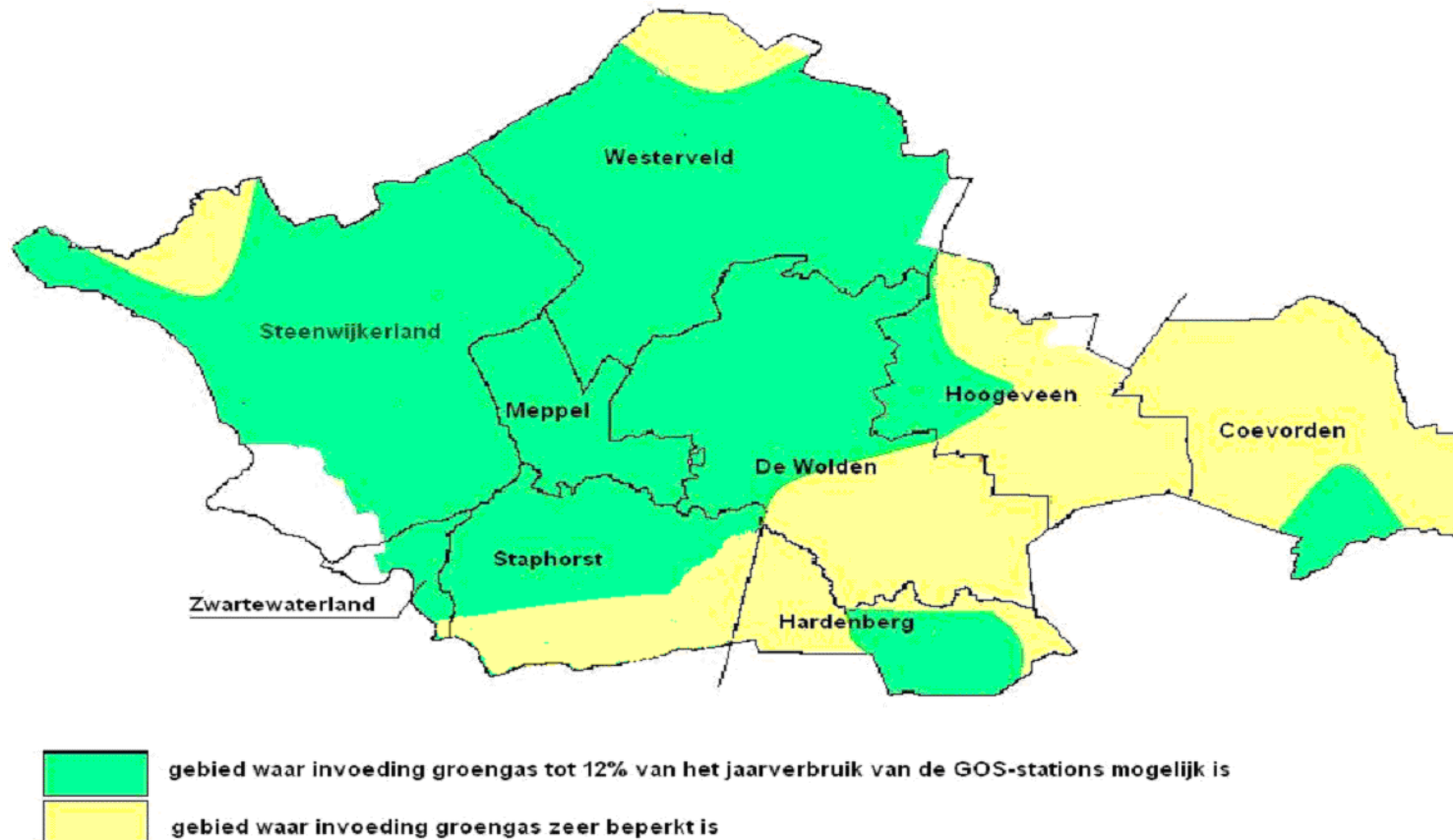


Gas demand limiting factor grid injection



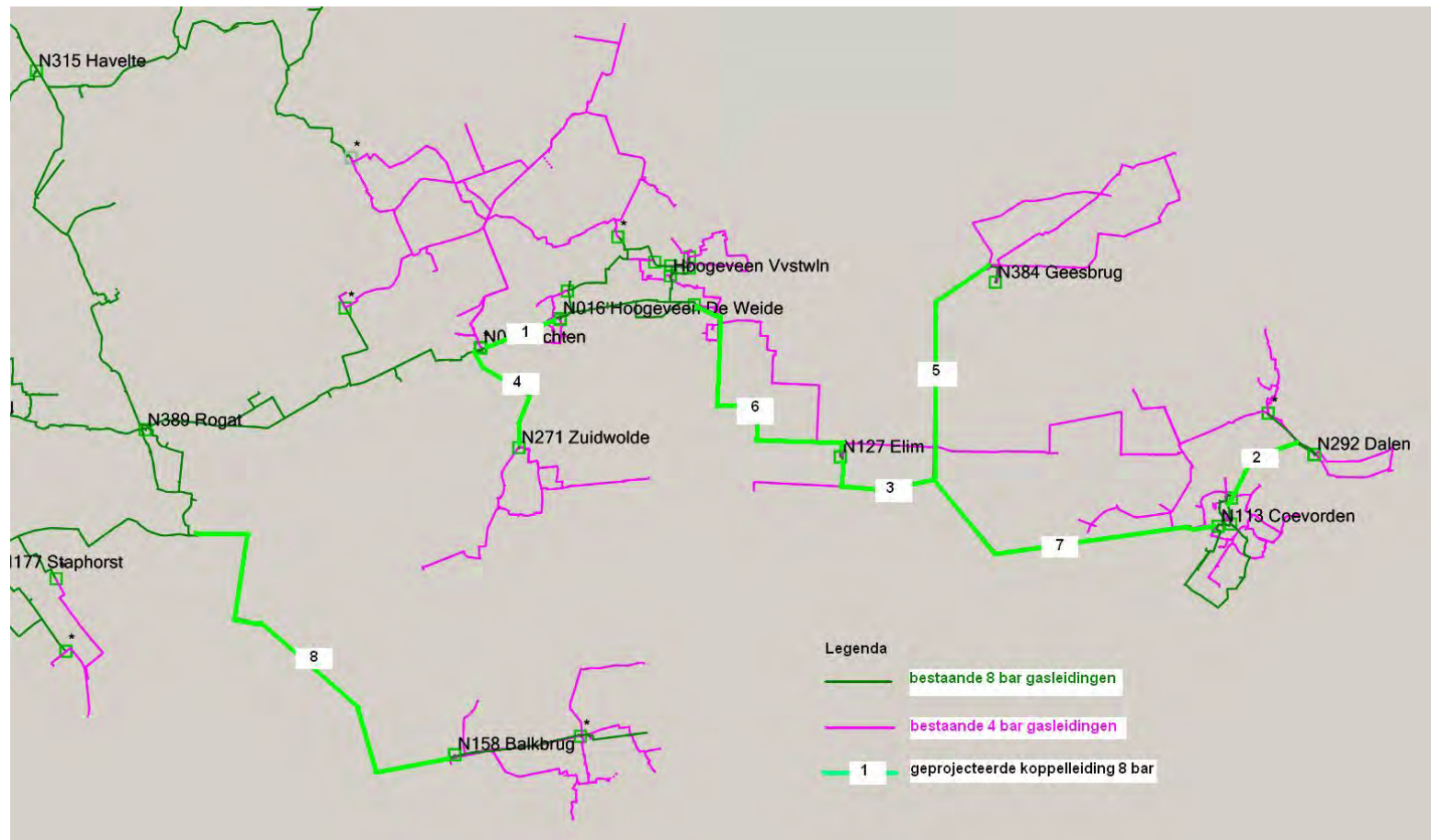


Results scenario study in local gasgrid of Rendo Green area: 12% natural gasreplacement possible



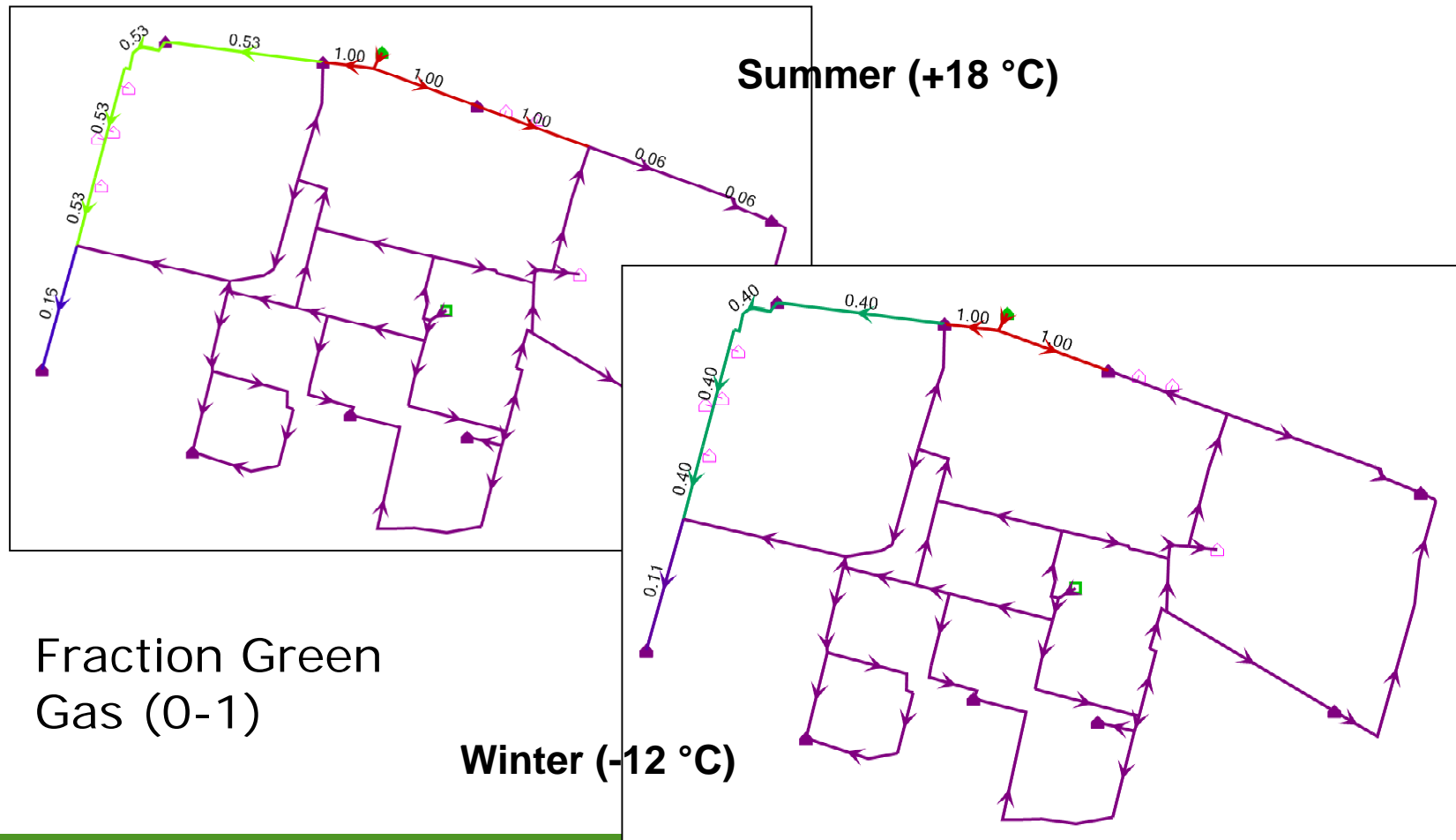


Extensions regional gasgrid to replace 12% of the natural gas; result of regional feasibility study





Gridcalculations (pressure, velocity, fraction)





Stimulation Biogas/Green Gas development by SDE+

New stimulation programm SDE+ from july 2011

- One stimulation budget for all catagories of Renewable Energy
- 4 opening moments/y to start with cheapest categories of RE.
- Max. feed inn tarif E-production 15 €ct/kWh (Min. 9 €ct/kWh)
- Feed inn tarif Green Gas production depending on biomass input. Publication final feed inn tarif expected end of April '11.
- New is feed inn tarif for biogashubs in 2011.
- New in 2012 will be:
 - ▶ subsidy for selfsupply biogasconsumption
 - ▶ new category for renewable heat production (also from biogas)



Ongoing projects

- Scenarios gridinjection
- Developing an overflow for gridinjection
- Evaluation of digesters in NL. First report expected in Sept. 2011.
- Projectmonitoring Green Gas projects
- 14 demo/pilotprojects from tender 2010



Example of small scale digesters (Microferm)





Good practice example (Biogasproject Polderwijk Zeewolde with 5 km biogaspipeline to the village)





Questions?

Mathieu.dumont@agentschapnl.nl