

# 20 TWh/year biomethane 2020

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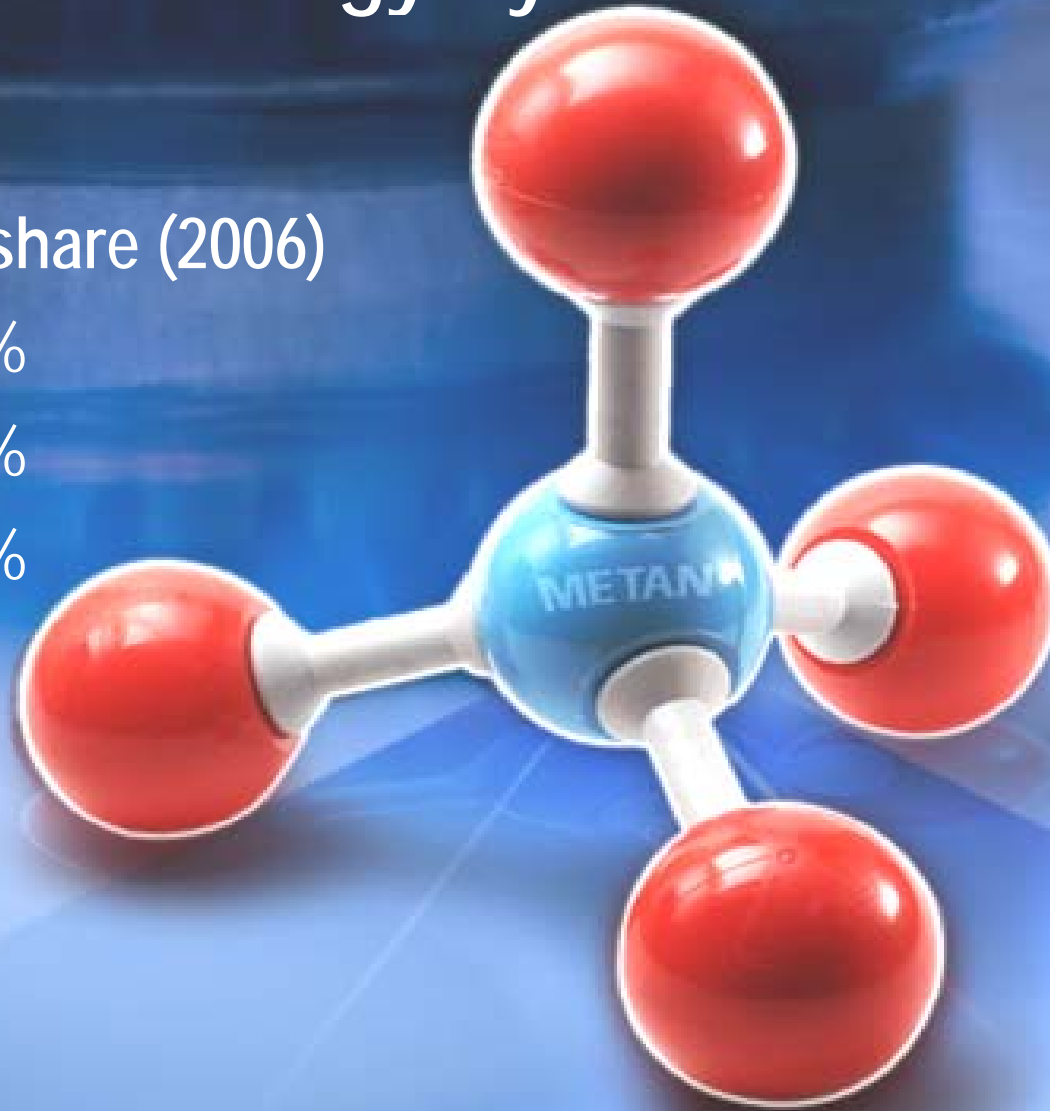


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# Can Biomethane have an Impact for the Future Energy System?

## Renewable energy share (2006)

- Global 12%
- EU 7%
- Sweden 43%

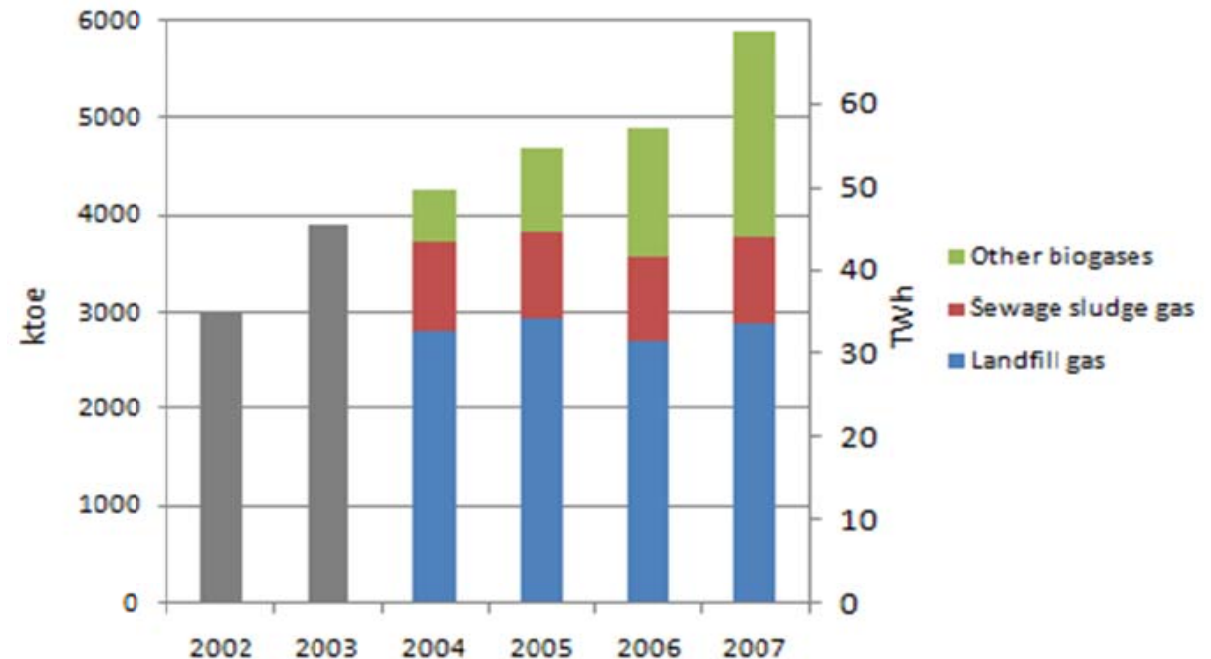


# Can Biomethane have an Impact for the Future Energy System?

## Biomethane share (2006)

- Global ?
- EU 0,32%
- Sweden 0,35%

Time to give up?



# There is a potential ...

... and the journey has just started

## Cities



Sludge  
Household waste  
Industry org waste  
Landfill

## Agriculture



Manure  
Rest-products  
Energy crops

## Forest



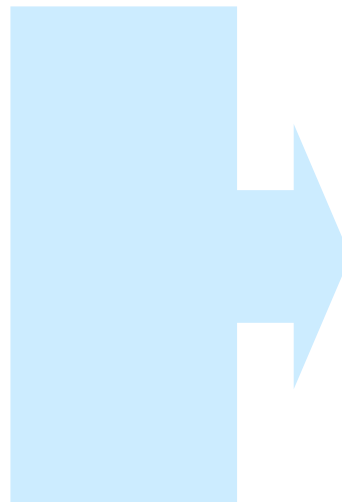
Residues from  
forest & industry

The greatest potential of all biofuels!

# From waste to first-rate Energy

## Swedish examples (potential):

Waste, digestion	15TWh	4%
Residues from forest, gasification	60 TWh	15%
	75 TWh	19%



## 40TWh is a realistic level

- 10% of all energy usage in Sweden
- 50% of the fuel consumption for the transport sector

Today: 1.5 TWh 2008

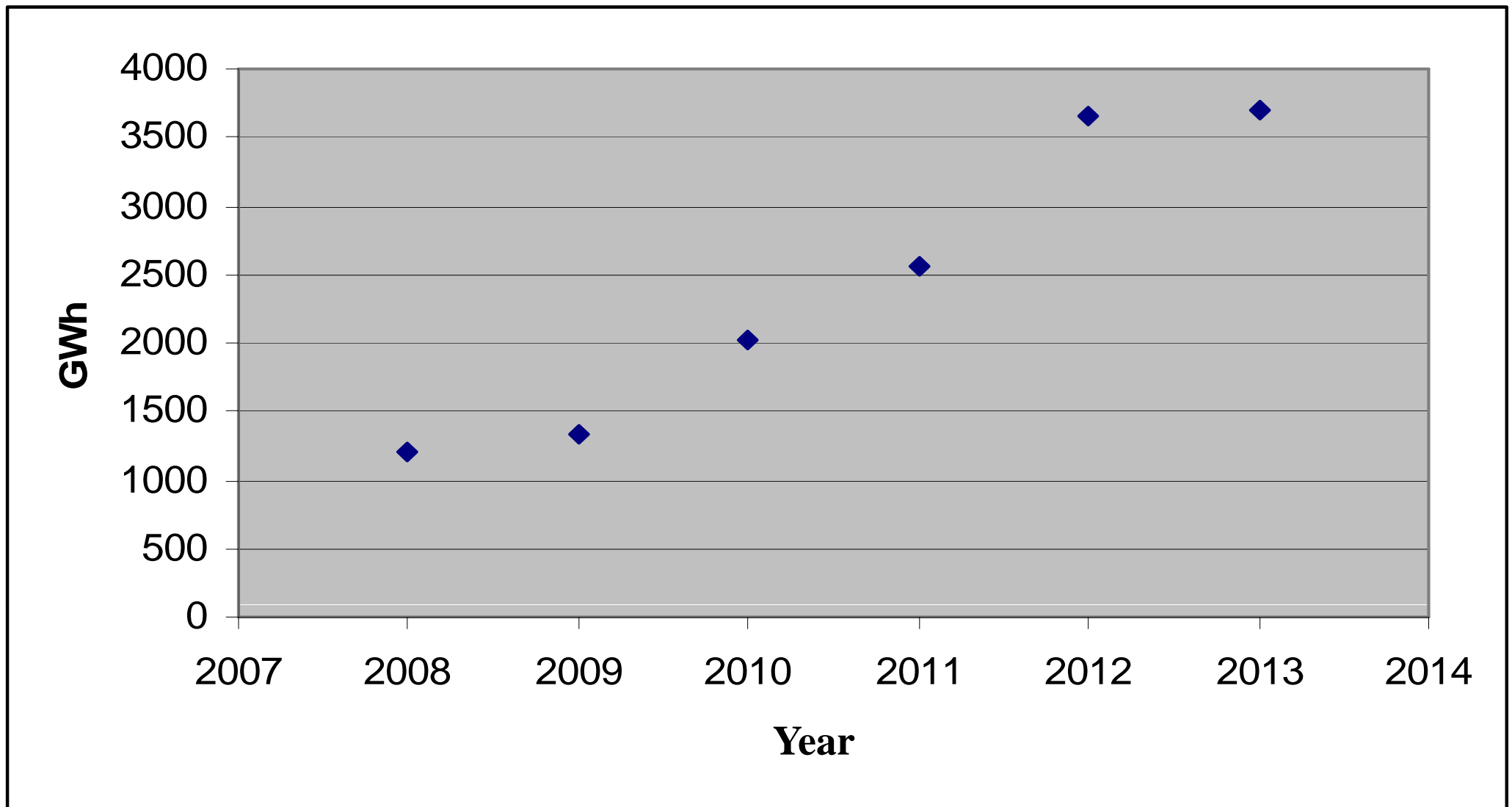
Goal 1: 3 TWh 2013

Goal 2: 20 TWh 2020



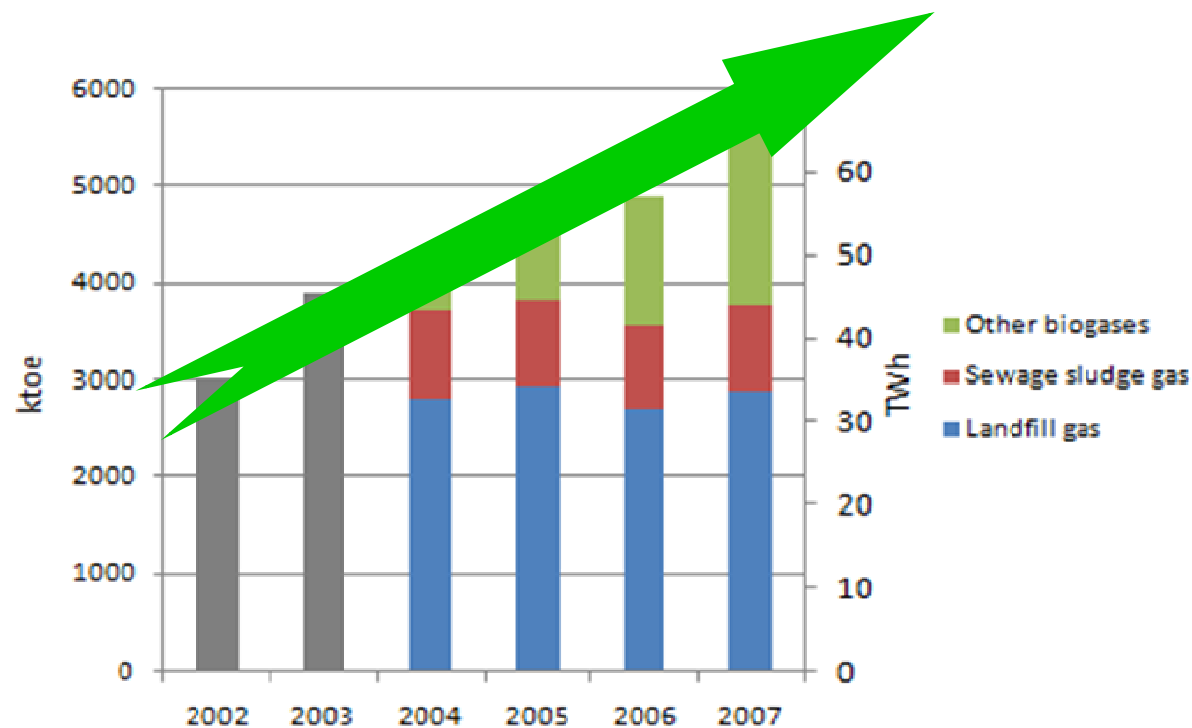
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# Prognosis for biogas production



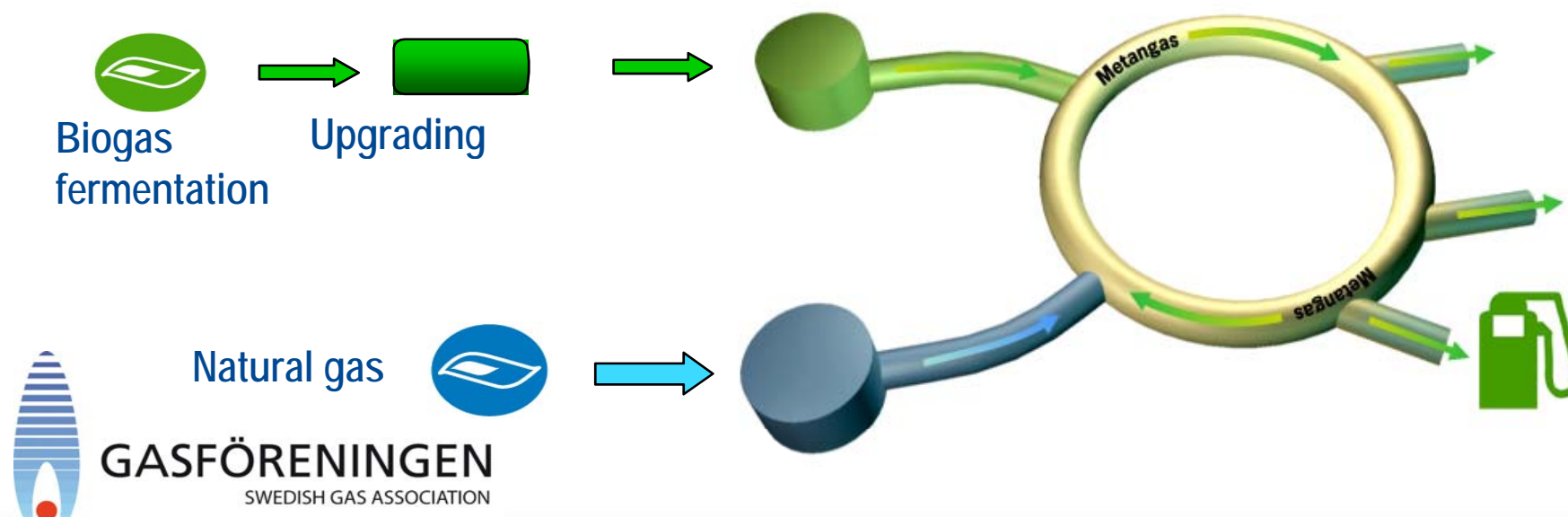
# Strong development!

- New substrate, e.g. straw
- Make the digestion more efficient
- LBG opens new Markets
  - lower haulage cost
  - trucks, dual-fuel
  - ship
- Increased volume through Gasification



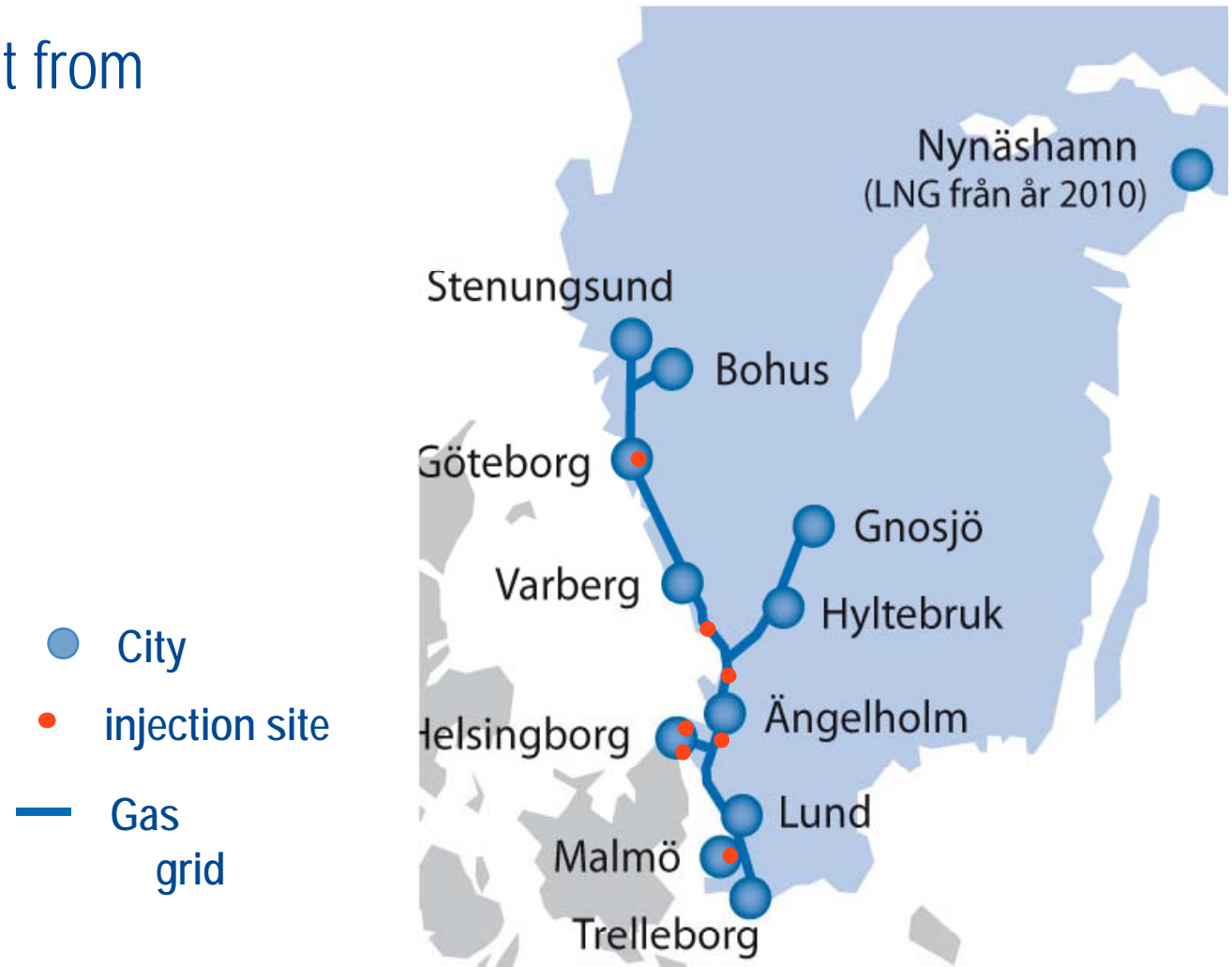
# Coordination of infrastructure and synergies biogas - natural gas - hydrogen gas

- Biogas can be distributed through existing natural gas grid
  - Low distribution costs
  - New customers can be reached
  - Continuous sale
- Biomass gasification can increase share of renewable gas in the grid
- Hydrogen gas can theoretically be added to the grid



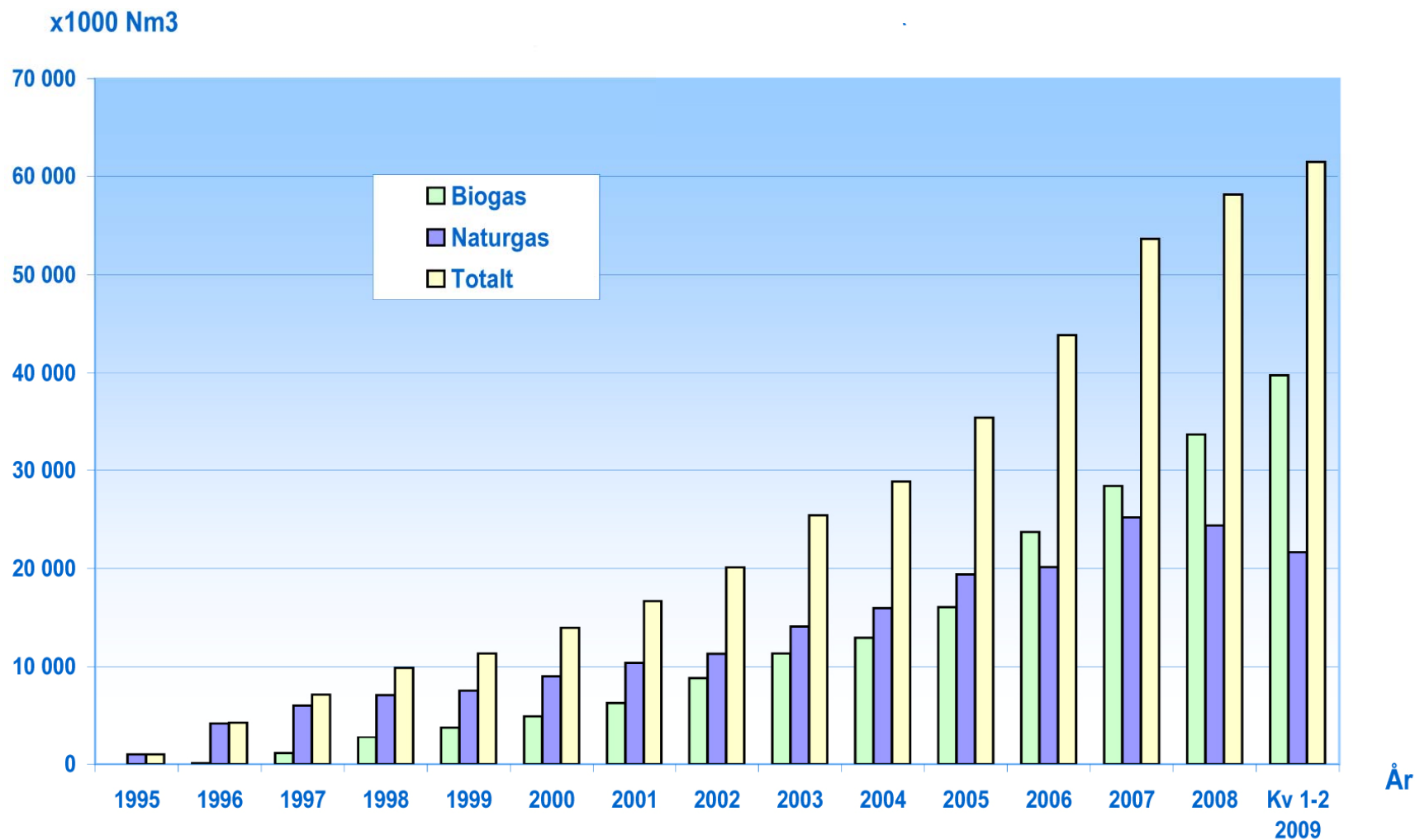
# Biomethane + Natural gas = True

BioMethane can benefit from investments taken by Natural Gas



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# Volume methane for vehicles





Thank you!

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