



Nederlandse
onderneming
voor
energie en
milieu b.v.

A circular inset showing a city skyline at night with illuminated skyscrapers.

The Dutch GIFT

A circular inset showing a taxi at night with its lights on.

**Paula Meijer
Novem**

**IEA Bioenergy Task 38
12 November, Edinburgh**



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A photograph of a city skyline at night, with illuminated skyscrapers and a dark sky. The image is framed within a blue oval shape.

The Dutch GIFT

A photograph of a taxi fleet at night, with yellow taxis and their headlights on. The image is framed within a blue oval shape.

Climate Neutral Fuels in the Netherlands: The GAVE-programme



The history

Inventory phase from 1998 to 2000:

- **Initiated by Ministry of Environment**
- **Review of world wide developments**
- **Climate Neutrality**
- **Creating new links**
- **Creating general support**
- **Opening new sectors for RE**



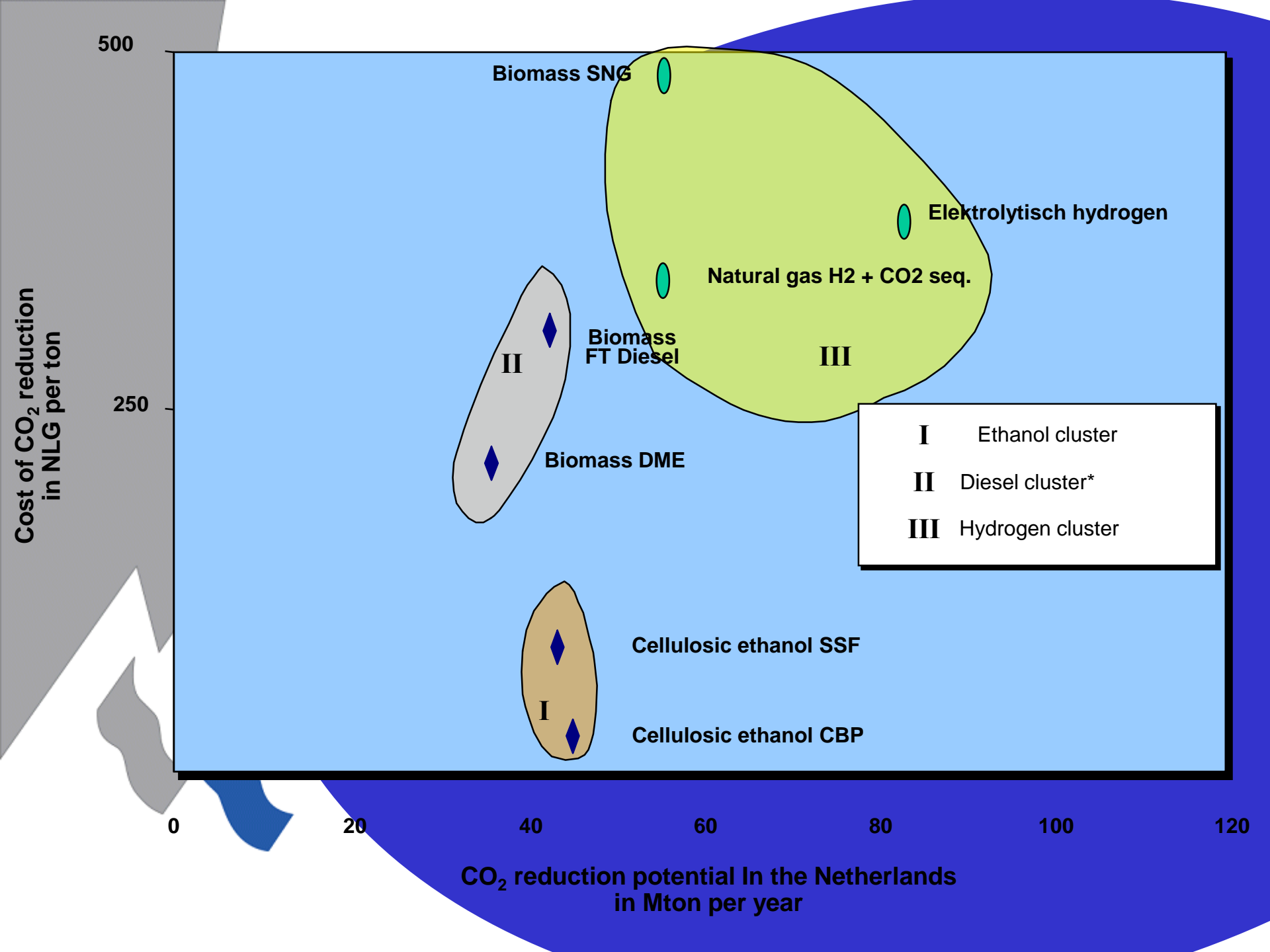
The Results

**20 attractive climate neutral fuel chains
(Second Generation Bio-fuels)**

- 14 for transport sector
- 06 for natural gas sector

Strong support from Industrial Stakeholders

**Recommendation for Chain Demonstration
Phase**



500

Biomass SNG

Elektrolytisch hydrogen

Natural gas H₂ + CO₂ seq.

II

Biomass FT Diesel

III

250

Biomass DME

I Ethanol cluster

II Diesel cluster*

III Hydrogen cluster

Cellulosic ethanol SSF

I

Cellulosic ethanol CBP

0

20

40

60

80

100

120

CO₂ reduction potential in the Netherlands in Mton per year

Cost of CO₂ reduction in NLG per ton



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Chain Demonstration Phase

2001 Formation of Alliances

2002 Basic Design

2003 - 2008 Demonstration of Fuel chains

2008 - Market introduction

Available budget: EUR 14 million

Green Fiscal support under development



GAVE-2001

Formation of alliances

Focus on whole chain

Subsidy programme of EUR 0,5 million

7 proposals on production and usage of:

Fischer Tropsch Diesel

Methanol

Hydrogen

Synthetic Natural Gas

Bio-diesel

Rapeseed oil



Selection criteria

- **Alliance covers whole chain**
- **Time to commercial level**
- **Potential and costs of CO₂**
- **Reduction other emissions**
- **Footboard to new developments**
- **Detailed steps to successful demonstration and market introduction**



Approach

- Participation of organisation with capacity to introduce on the market
- Explicit attention for organisational aspect of whole chain
- Fiscal instruments for bio-fuels
- Awareness creation for public acceptance
- Utilisation of existing infrastructure



Support measures

- Strategic studies
- Creating public support
- Providing platform for information on knowledge and stakeholders
- Supporting government
- International activities

Preparing subsidy programme for Basic Design and for Chain Demonstration

A woman with dark hair is shown from the chest up, holding a glowing, translucent globe of the Earth in her hands. The globe is illuminated from within, showing continents and oceans. The background is a warm, reddish-brown color. The entire scene is framed within a red oval shape.

A sustainable future?

Not without

Cleaner and Greener fuels