



Utilizing natural qualities for regional economic development

Experiences in Fryslân, the Netherlands



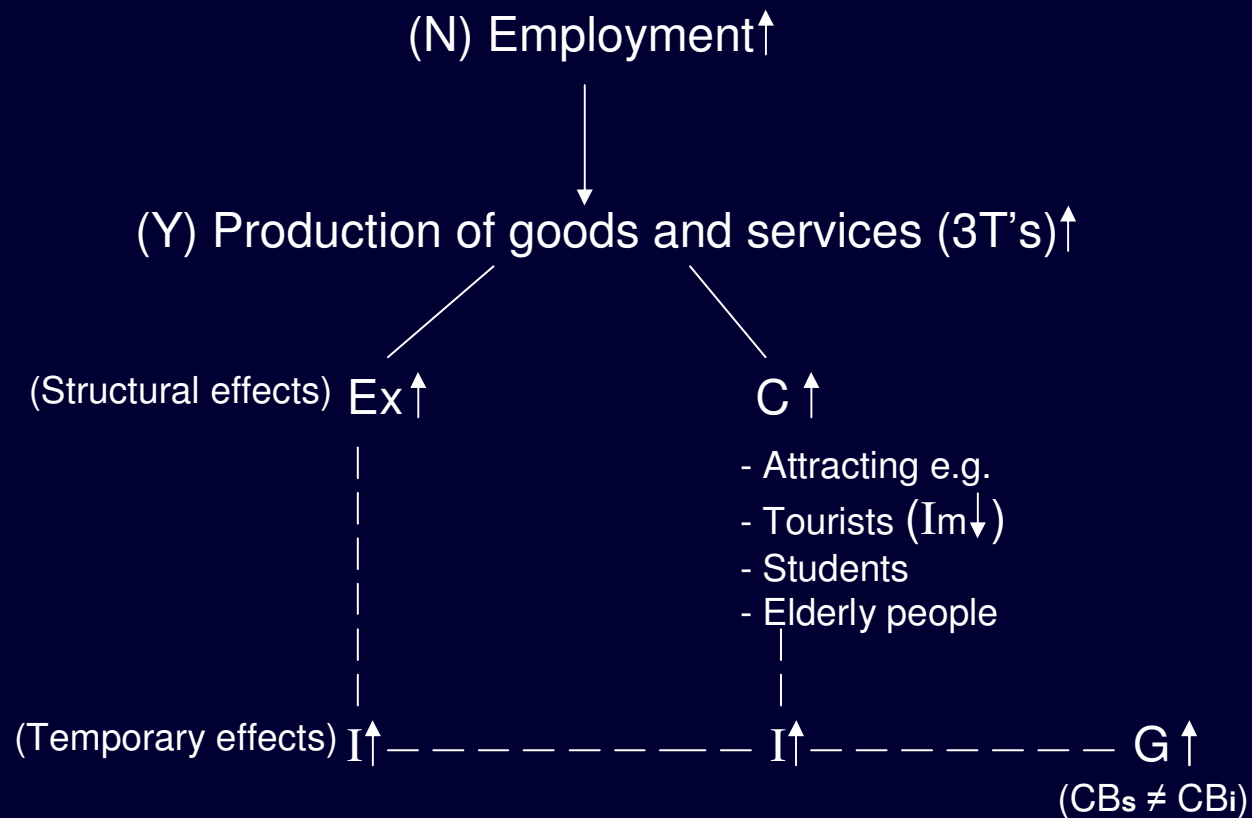
Introduction (What, Why)

The approach (How)

Some examples (How, when, who)

Experiences

Economic development



The approach

role of (regional/local) government

concept

Policy Approach

Adopting a favourable policy – *generic*



From a vision to strategy

- Costs of production
- Productivity
- Adaptability and innovation



Improved competitive
position Friesland

Programmed approach

Brokerage, Linkage – Specific



From strategy to project

- Utilizing regional qualities
- Integral
- Meeting demands



Improved competitive
position Friesland

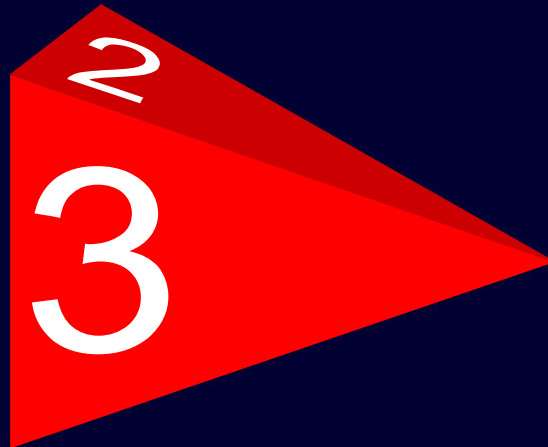
Programmed approach

Launching Customer



From strategy to project

- Utilizing regional qualities
- Integral
- Meeting demands



Improved competitive
position Friesland

The approach

role of (regional/local) government

concept (ingredients)

Programmed approach

Brokerage, Linkage – Specific



From strategy to project

- Utilizing regional qualities
- Integral
- Meeting demands



Improved competitive
position Friesland



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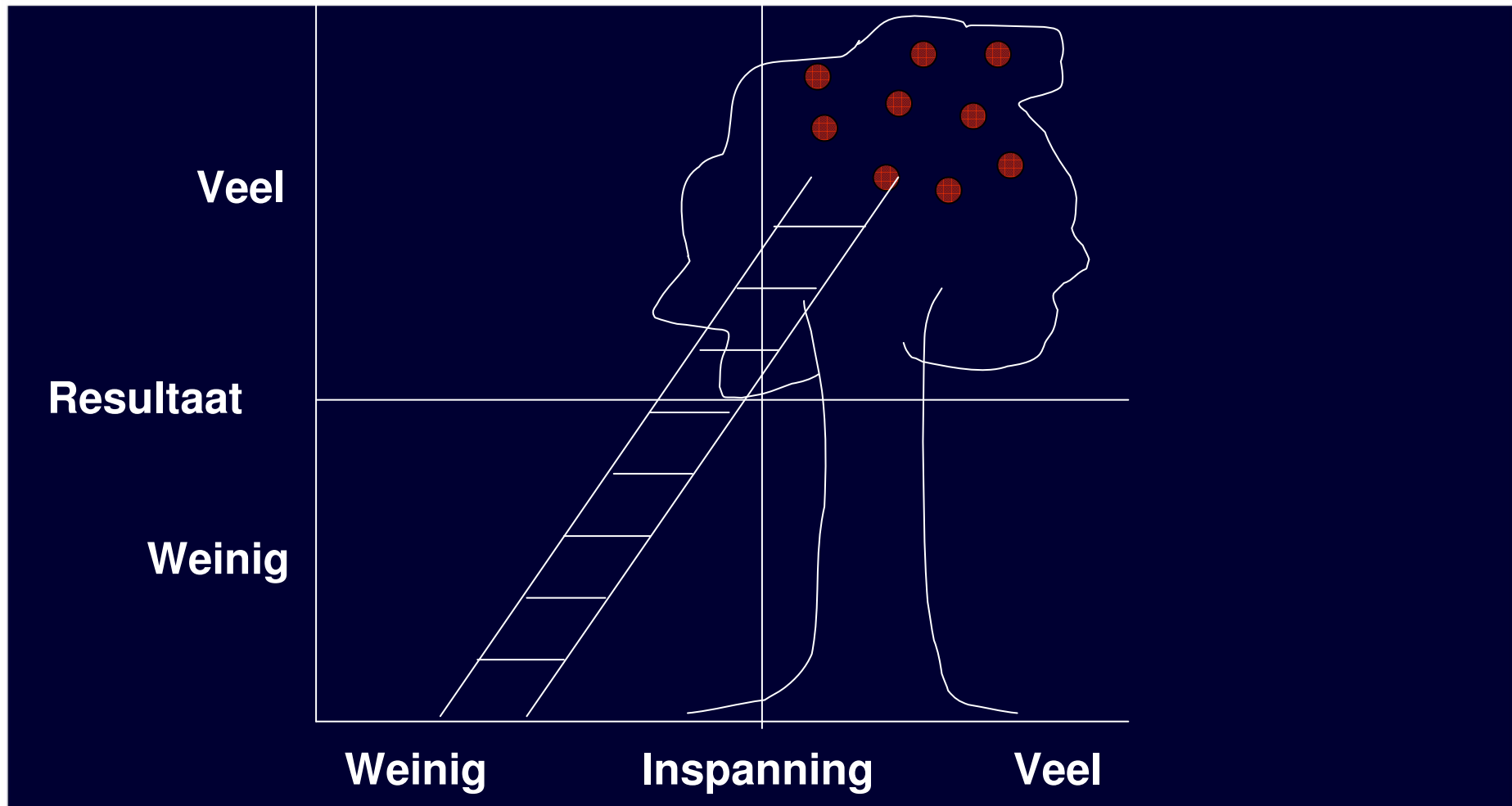
SUSTAINABLE INNOVATION



-and now for something completely different!
-et maintenant quelque chose tout a fait different!
-und jetzt etwas ganz Neues!



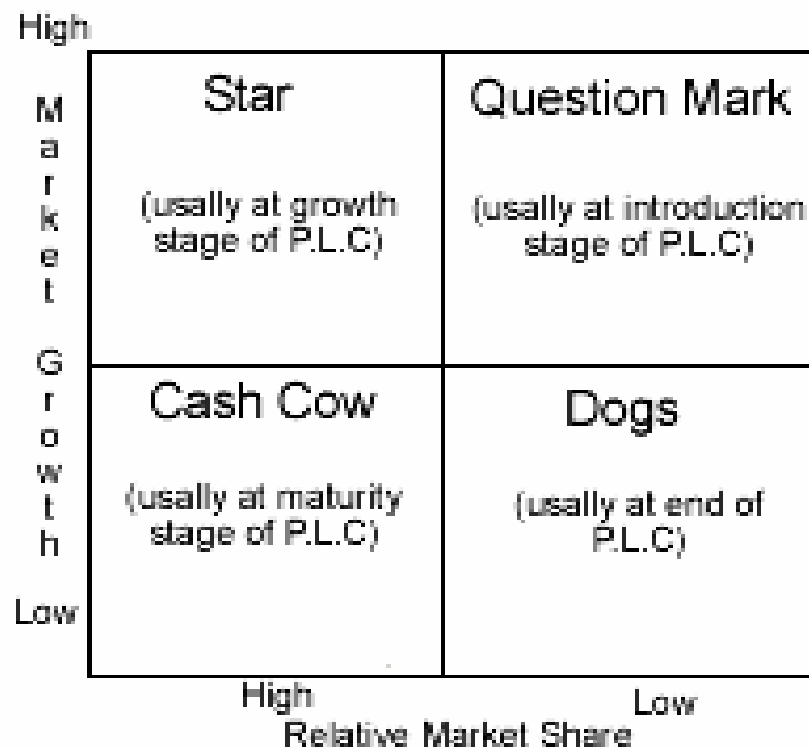
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Economic development



BCG Matrix



Source: www.learnmarketing.net

Backing winners or backing challengers

Verwerven
Erven
Bederven

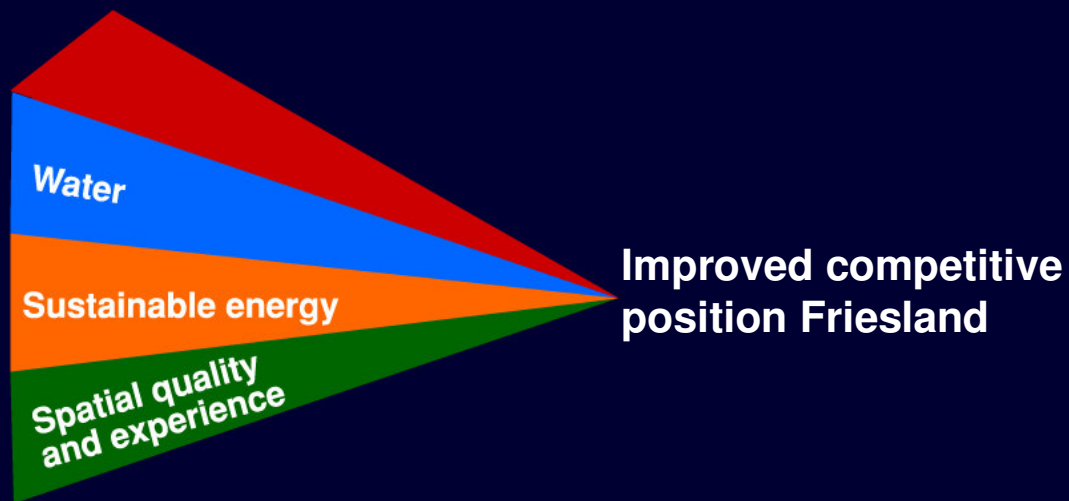
Programmed approach

Brokerage, Linkage – Specific

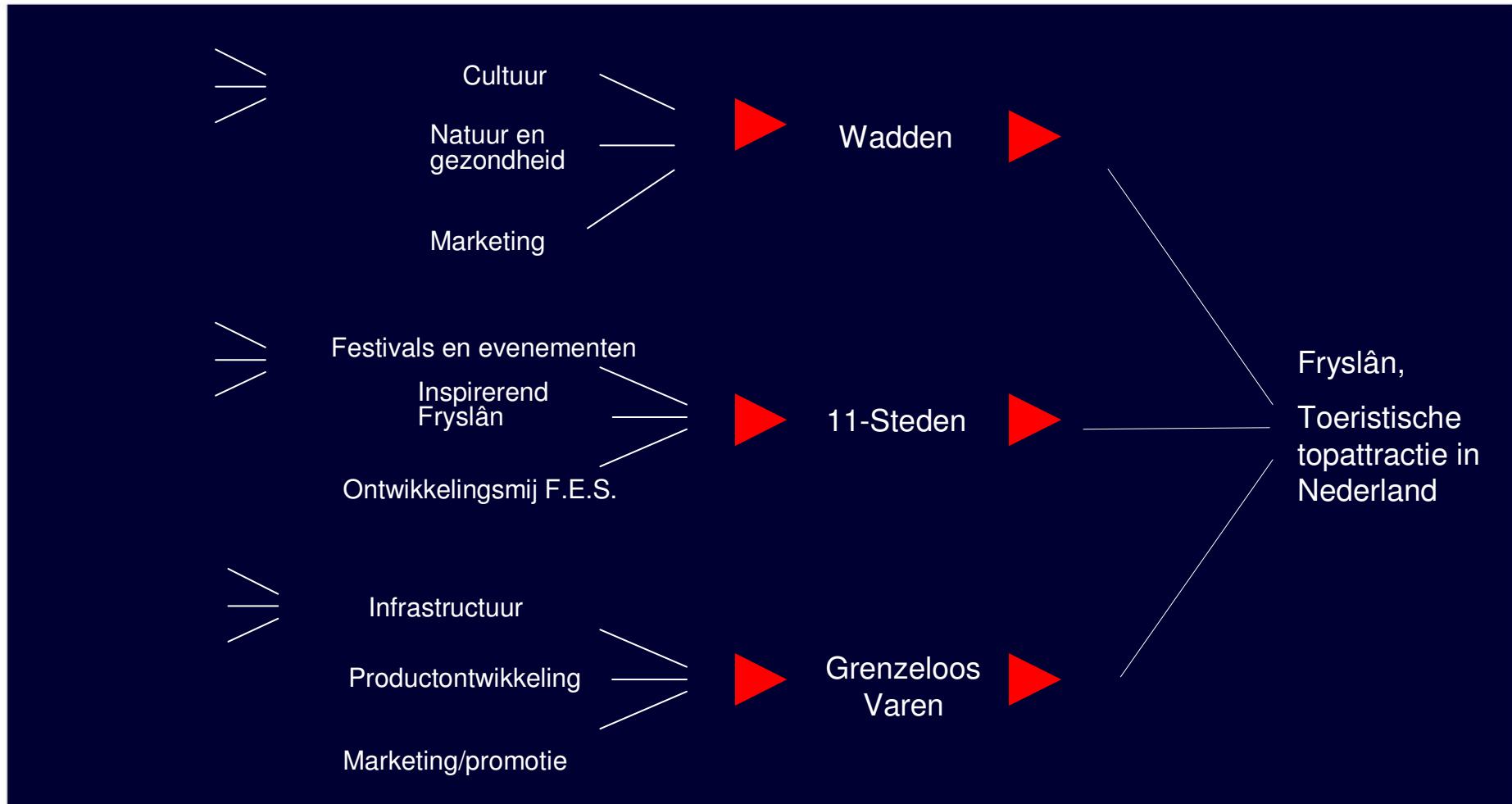


From strategy to project

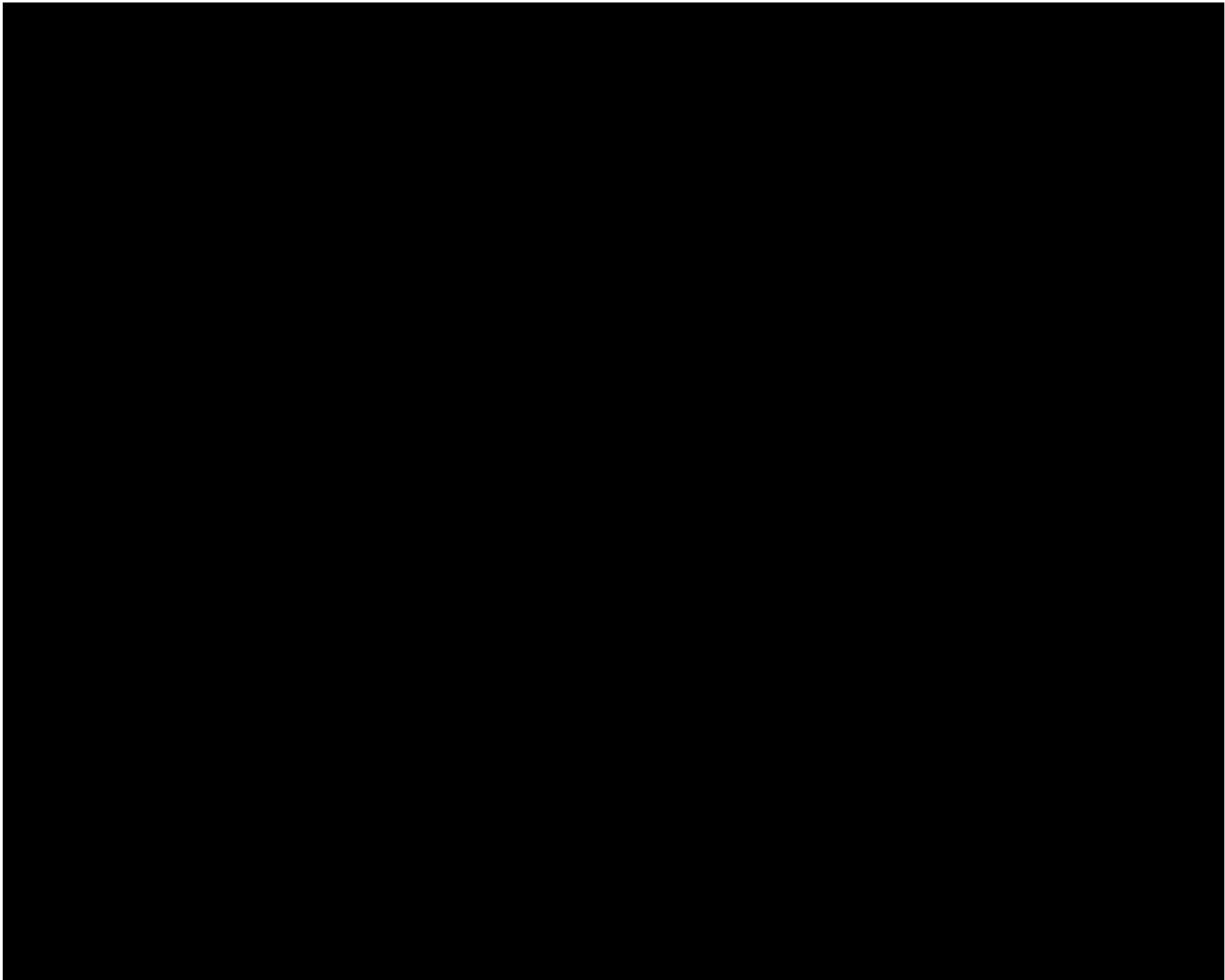
- mission, vision, programs & projects



Tourism



Example 1 (tourism, sustainable energy & water)



SUSTAINABLE INNOVATION



SUSTAINABLE INNOVATION



Promoting Sustainable Innovations

HOME

INNOVATIONS

ANNOUNCEMENTS

PSI

CONTACT

PSI - Promoting Sustainable Innovations

Kathleen Van Brempt, Flemish minister of Mobility...

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Announcement

Frisian Solar Challenge
26th of June – 1st of July
2008...

[read more »](#)

Innovation

"Green Rooms" - a living
experiment in
environmental educati...

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PSI

This website is sponsored by the EU, Interreg North Sea Region, the Cartesius Institute and the Province of Fryslan www.fryslan.nl. All of them are participating in the FSI (Facilitating Sustainable Innovations) project.

The FSI project aims to create an interregional cooperation on sustainable innovation in the North Sea Region.

[read more »](#)

Sustainable Olympiad

SUSTAINABLE INNOVATION



FRYSEPS

frysian solar energy products & services



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MAIN MENU

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WELKOM BIJ FRYSEPS

Fryseps is de werknaam van een breed samenwerkingsverband van verschillende organisaties uit Friesland om innovatieve toepassingen van fotovoltaïsche (PV-) zonne-energie te ontwikkelen voor en door Friese bedrijven en instellingen.

Doel is de versterking van de Fries economie en kennisinfrastructuur én de ontwikkeling van Friesland en de Waddeneilanden tot een gebied met kennis en toepassing van PV-producten en PV-technologie op een hoog niveau.

Het programma bestaat uit korte-termijn projecten, waarvan de resultaten al snel zichtbaar zijn, en een aantal ambitieuze lange-termijn-projecten, die in de toekomst nadrukkelijk het duurzame en ondernemende imago van Friesland in de wereld mede kunnen bepalen.

Het Cartesius Instituut te Leeuwarden, instituut voor duurzame innovaties van de drie Nederlandse technische universiteiten, faciliteert de activiteiten van Fryseps.

SUSTAINABLE INNOVATION



Brundtland
centre



SUSTAINABLE INNOVATION



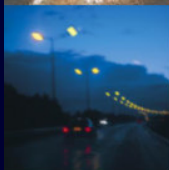
Zero energy holiday houses

Beach cabin PV-system

Smart road lighting

Wireless public internet

Built environment and infrastructure



Solar pump for small boats

PV power in sailing boats

PV city tour boat

PV powered bicycle lights

Mobility



FRYsian Solar Energy Products and Services

Education and facilitation

Knowledge package for schools

Financing system

Production facilities



[Geos Energie]

Afsluitdijk: Sustainability beacon

PV covered dike

Brundtland centre



SUSTAINABLE INNOVATION




April 4, 2007

First Frisian Sustainable Innovation Contest

It is our pleasure to announce the first Frisian sustainable innovation contest. The contest will be held in August, 31, 2007. It is organized by the Cartesius Institute, Institute for Sustainable Innovations of the Netherlands' Technical Universities (TU Delft, TU Eindhoven and TU Twente) .

The theme is "The Frisian Land". The issue is how the Frisian countryside and cities can remain sustainable for people and nature. The issue addresses questions such as: what new products and services can keep the Frisian region attractive for living, working and travelling, what novel activities can maintain balance of natural qualities and economic development, how to use regional qualities for sustainable innovations and so on?

This year the floor will be given to young designers from academic design schools. If you want to participate please contact Wini Weidenaar for more information (wini@ww-pr-organisatie.nl).

provinsje fryslân
provincie fryslân 

The Frisian Land:

FRISIAN SUSTAINABLE INNOVATION CONTEST

innovation
sustainability
design

**A flourishing future for
the Frysian country side?**

Department of Economics, Recreation and Tourism

SUSTAINABLE INNOVATION



SUSTAINABLE INNOVATION



Who will join us from **Lisbon** to **Göteborg**?



The "Lisbon to Göteborg sustainable vehicle race" !!

A race across the continent from economic start to sustainable finish for solar powered and other sustainable vehicles.



Promoting sustainable innovation to a large public

Approaching the greenhouse effect in a challenging way;

Showing new innovative transport opportunities:

Drawing attention to the European Union funding programmes;

With events ranging from culture or sport to technology along a route of about 3100 kilometres.

Early summer 2009

Join us in this race or take the opportunity to organize an event along the route !

Interested ?

Please contact Hans van Meerendonk from the province of Fryslân, the Netherlands.

j.h.vanmeerendonk@fryslan.nl

+31 (0)58 29 25 402

Experiences



28 idea killers...

1. Ja, maar
2. Dat bestaat al!
3. Kan niet.
4. Dat is niets voor onze klanten.
5. Laten we realistisch blijven.
6. Te duur.
7. Dat is niet logisch.
8. Er is meer onderzoek nodig.
9. Geen budget.
10. Geen fouten maken
11. De directie zal er niets voor voelen.
12. Ik ben niet creatief.
13. Niet mijn verantwoordelijkheid.
14. Als het echt een goed idee was, hadden anderen het allang geprobeerd.



28 idea killers...

15. Dat is een te grote verandering.
16. De oudere garde zal het niet gebruiken.
17. Te lastig om te beheersen.
18. We doen het al tijden op deze manier, waarom anders?
19. Daar hebben we geen tijd voor.
20. De markt is nog niet rijp.
21. Daar zijn we te klein voor.
22. Laten we de zaak wel reëel blijven bekijken.
23. Laten we het in beraad houden.
24. We hebben het ook zonder kunnen rooien.
25. Dat werkt misschien ergens anders, maar niet hier.
26. Dat staat al in onze toekomstplannen.
27. We zullen er later eens iemand aan zetten.
28. Sinds wanneer ben jij een expert geworden?



Competences

- Vision (IQ) - idealistic, dreamer, pioneering, outside the box
- Discipline (PQ) - focused, takes initiatives, autonomous, self disciplined, decisive
- Passion (EQ) - optimistic, hope, courageous, emphatic, inclusive, humor
- Conscience (SQ)- enthusiastic, takes responsibility, integrity, fair, inspired

As for the future, your task is not to foresee, but to enable it



- The society which best solves its problems over time is the society that allows for the highest number of trials

von Hayek (1960) in the spirit of Joseph A. Schumpeter

- The ability of renewal explains growth and that renewal occurs where the implementation of experiments is facilitated

Historians Nathan Rosenberg and L. E. Birdzell Jr. (1991) in their attempt to explain the West's road to success.

- Flexibility presupposes a large dissemination of power and resources within the organization. (a decentralized structure makes the best use of people's abilities)

Philip Klein and Edythe Miller (1996) to illustrate the importance of flexibility for the adoption of new ideas and technological change.



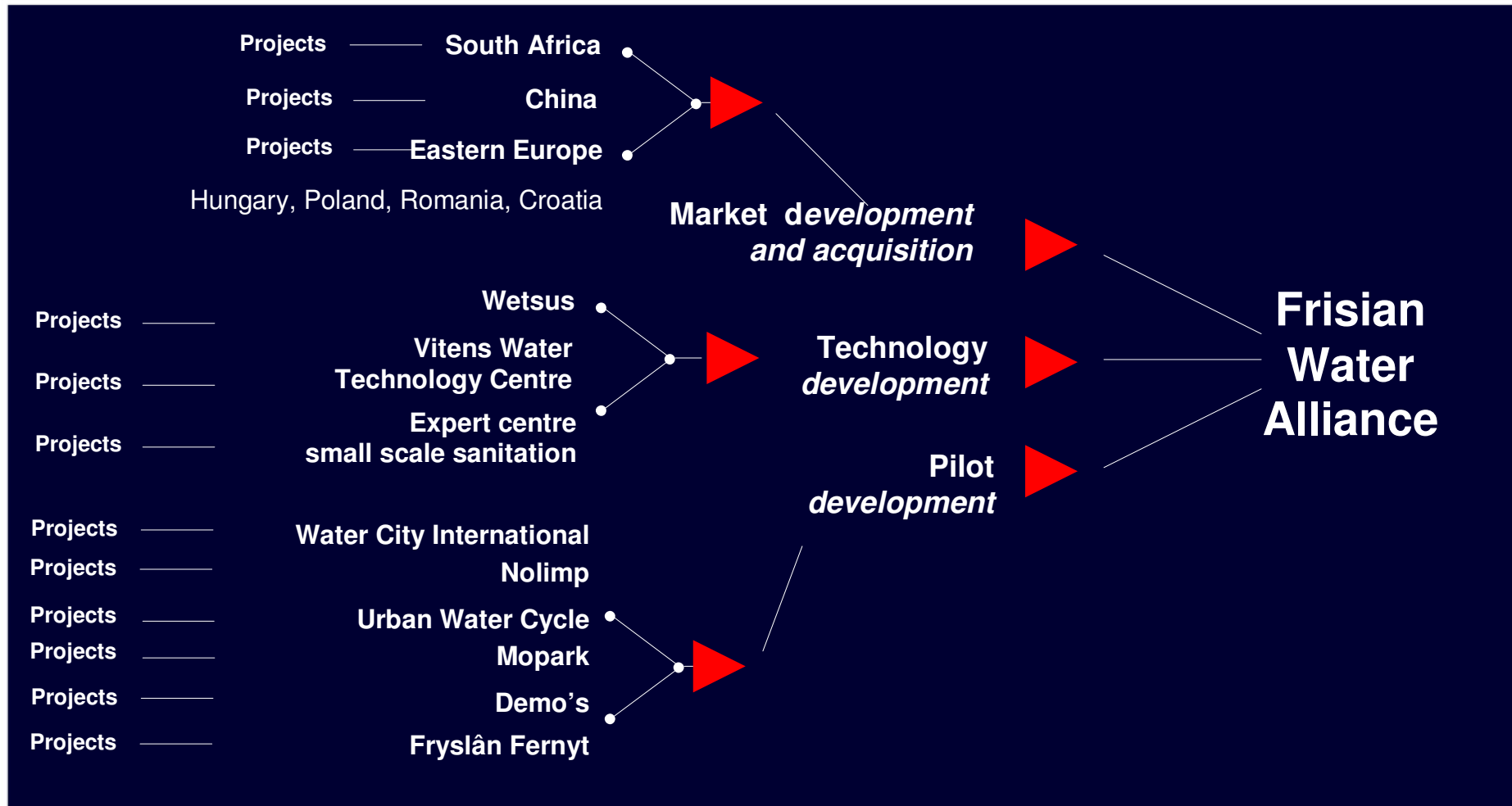
As the births of living creatures at first are ill-shapen
so are all innovations which are the births of the time

Francis Bacon

I think all great innovations are built on rejections

Louis Ferdinand Celine

Example 2 (Water)





Results

- Over 40 PPP projects
- Turnover € 150 mln (Fryslân € 100 mln)

Samenwerkingsprojecten FW A		Participanten																												
		Bedrijven										Overheden										Kennisinstituten						Buitenland		
Project(voorstel)	Omvang (x € 1000)	Pg	La	No	Vi	Aq	Wi	DMT	KK	Ov.	Lw	Sn	Sm	Ty	WF	KW	PF	Rijk	EU	Ov.	Ca	vM	UT	LUW	Nide	Ov.	Ov.	Bed	Ken	
FW A -markt-1	150																													
MBR-pilot Robertson (ZA)	317																													
IWRM-studie Western Cape (ZA)	157																													
Studentenuitwisseling (ZA)	10																													
Watercentrum Qin Huang Dao (Ch)	500																													
Watercentrum Bakoe (Azb)	200																													
Marktontwikkeling dec. zuivering	53																													
Leerstoelmilieutechnologie	900	€	€	€																										
Centre of Excellence SWT	6787	€	€	€																										
IBA-monitoring	3000																													
Int. Workshop Urban Water	30																													
Water City Internationall	973																													
Waterplan Blauwe Diamant	89																													
Water City Internationall 2	10000																													
Schone stadsgrachten	3500																													
Waarden van water	136																													
Stad van Wateren Cultuur (ov)	12500																													
DES AH	1500																													
NOLIMP	7450																													
De Leijen	1050																													

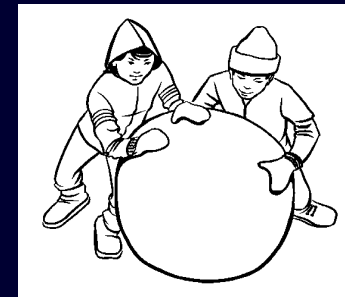
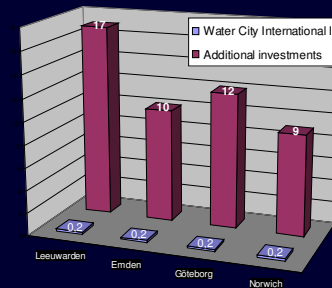
Frisian Water Alliance

Funds and budgets



Funds and budgets:

- Stakeholder contributions
- Provincial budgets
- EU- LIFE
- EU- Interreg IIC, IIIB, IIIC
- EU- Innovative Actions
- EU- EFRO
- NL- Regional Economic Development
- NL- Environmental Department
- NL- Stimulation export water sector
- NL- Department Development Co-operation



International projects



Water City International (EU)

Pilot development



Goal

Upgrading functions of urban water

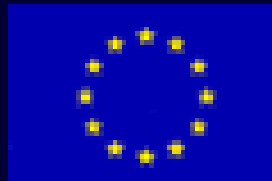
Co-operation of 11 European cities

Knowledge exchange

Actual improvement projects

Period: 2002 -2006

Budget: € 10 mln



NOLIMP-WFD (EU)

Pilot development



Goal

Implementation of future EU water quality standards

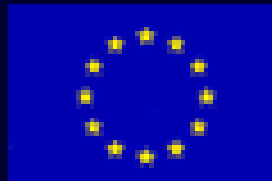
Co-operation of 5 European regions

Knowledge exchange

Pilot projects

Period: 2002 -2005

Budget: € 7,5 mln



MOPARK (EU)

Pilot development



Goal

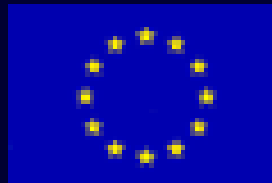
Guarantee sustainability
of National Parks

Co-operation of 6 European regions

Knowledge exchange
Pilot projects

Period: 2003 -2006

Budget: € 5,6 mln



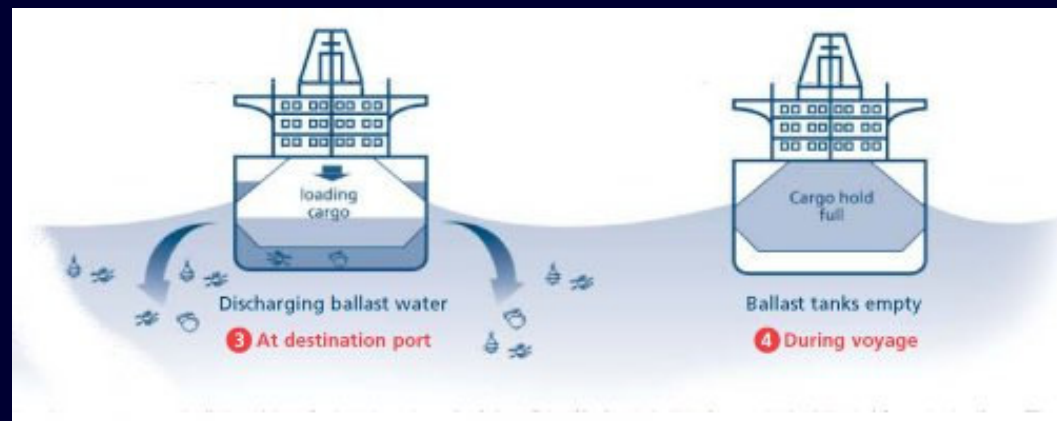
WATER

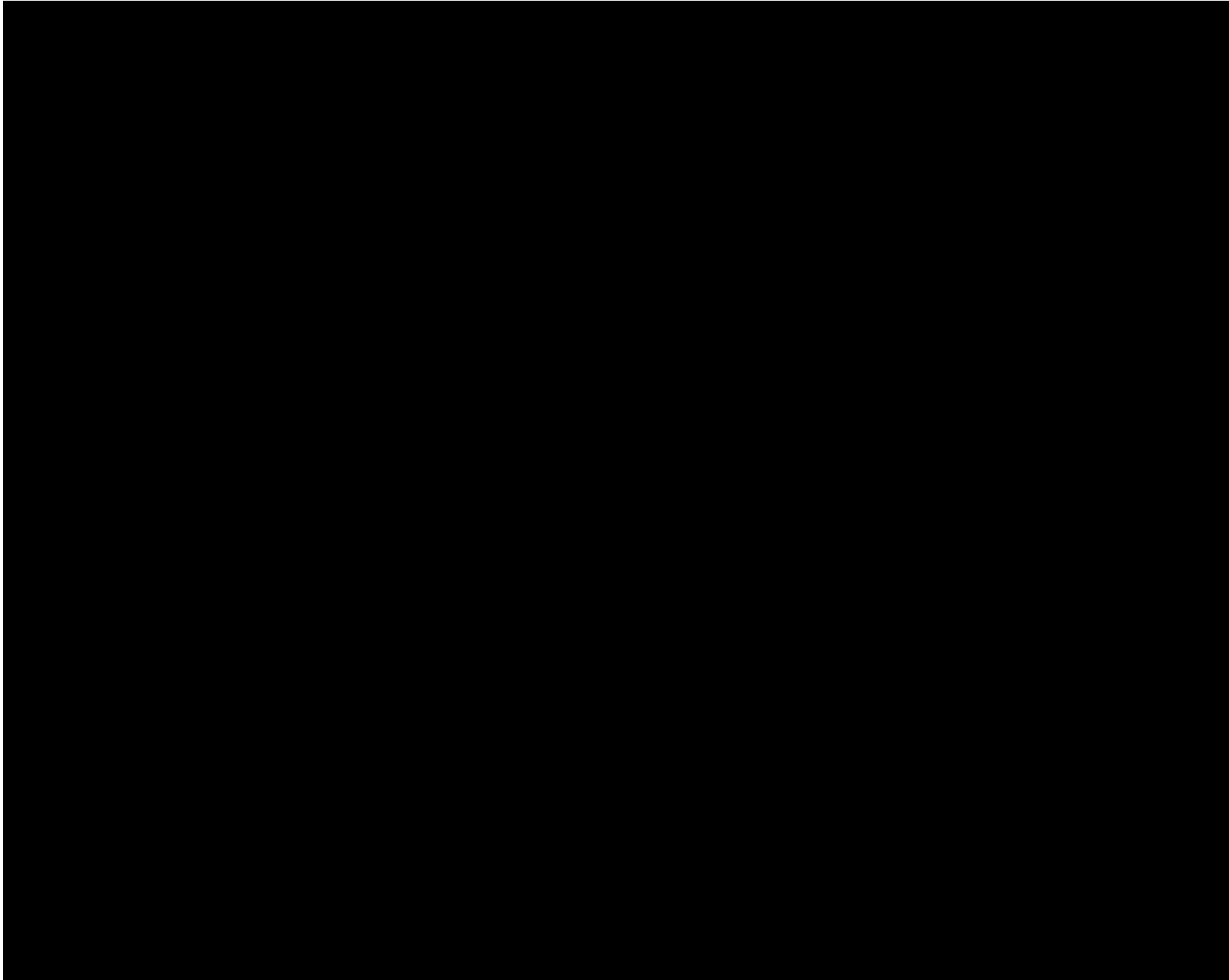
Pilot development



Innovation programme Fryslan Fernyt:

- Ballast water treatment
- Waste water treatment house boats
- Galvano water treatment
- City district waste water treatment
- Autonomic Filtercitometer





Ballastwater

SUSTAINABLE INNOVATION



	investering	jaarkosten	extra arbeidsplaatsen	w.v. onderzoekers
Duurzame energie: reductie 513 mln ton CO2				
Energiebesparing: biodiesel, isolatie, zon, micro-wkk	980	113	1131	10
Biofuel productie, centraal (elektra en gas)	296	51	511	20
Biofuel productie, decentraal (gas en vloeibaar)	70	13	130	0
Zonneproducten	122	19	187	30
subtotaal	1,468	196	1,959	60
Waterbeheer				
Waterkennis: technologie, starters, demos	55	15	145	60
Watergebruik: natuur-zuivering, ICT, attracties	140	27	273	20
Natuur: kustgebied, wadden, educatie	21	10	99	20
Export: markt, ontwikkeling, opschaling	19	8	83	20
subtotaal	235	60	599	120
Ruimtelijke kwaliteit				
Toerisme: afsluitdijk, sporten, toers	93	11	110	50
Cultuur: ateliers, festivals, monumenten	50	6	63	20
Natuur: ict op wad, wellness, landgebruik	80	9	88	20
Zorg: ict, recreatie, vervoer	151	15	151	30
	374	41	411	120
Duurzame innovaties: Cartesius Instituut, Frisjes	20	13	125	60
Totaal	2,097	309	3,094	360