

Economic concepts for socio-economic vitality and biodiversity

Daily business and a promising concept

30 september 2010

Imagine the result

 ARCADIS

Introduction

Eric Schellekens
**Programme manager climate change,
innovation and spatial development**



 **ARCADIS**
Infrastructure - Water - Environment - Buildings

TEEB for business and climate

Engineering and environmental impact studies

Tidal economy as an innovative concept



Engineering and environmental impact studies

Daily business opportunities

Implementing ecosystem services and system services





Tidal economy; innovative concept for Delta Development

- Climate change
- Different engineering approach
- Demographic changes
- Employment, crisis, globalisation

Challenges

- Safety and safety resilience
- Sustainable fresh water supply
- Agricultural sustainability and resilience



Towards new concepts

Characteristics and key factors in system or ecosystem

Characteristics and key factors influenced by or important to deal with climate change

Characteristics and key factors as sustainable fundament for economic development

Imagine the result



Characteristics and key factors in delta's

Sea factors

- Saline circumstances
- Sea Dynamics; the tide

River factors

- Fresh water circumstances
- River Dynamics

Imagine the result

 ARCADIS

Tidal economy: Towards a tidal way of life

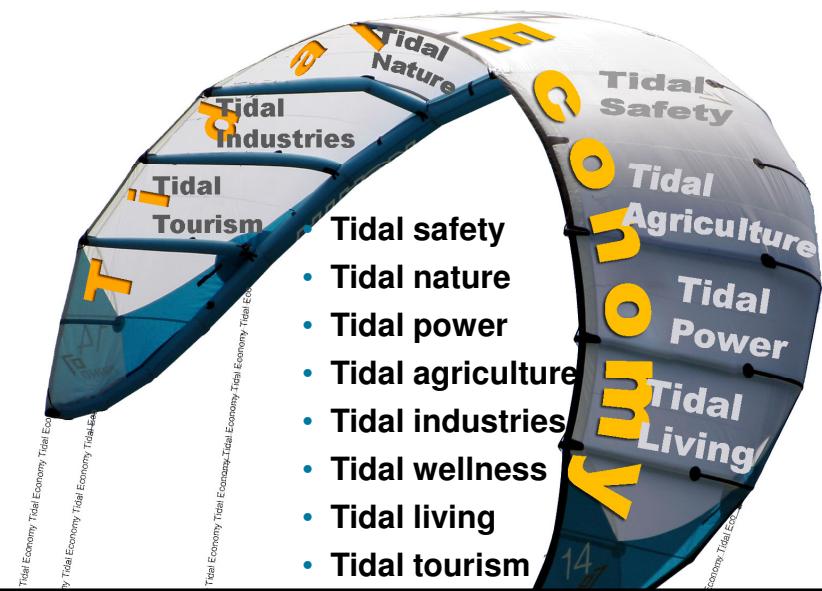
Why using the tide

Inspirational concept

Imagine the result

 ARCADIS

Concept to concrete project



Tidal terrace levee



- Multiple uses of space
 - Flexibility and adaptability
 - Insights TEEB implemented
 - Knowledge eco-engineering used

Building blocks Tidal terrace levee

Nature

Agriculture

**Recreation, wellness and
other economic activities**

 **ARCADIS**

Building blocks

Nature



 **ARCADIS**



Building blocks

Agriculture

 ARCADIS



Building blocks

Recreation, wellness and other economic activities

 ARCADIS

Tidal terrace levee pilot project in Yerseke?

Restoration of ecosystems

Economic sustainability



Costs and benefits



Investment requested	4 mill. euros
Additional expenses	0,6 mill. euros
Private investment	0,6 mill. Euros
Expected annual yield	0,5 mill. euros



Legal and social feasibility

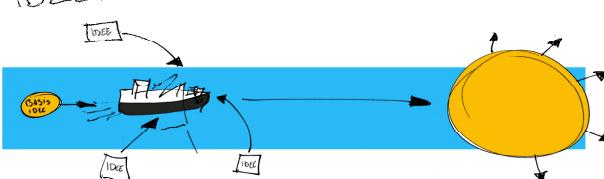


Tidal Economy: a global solution to local problems

Product Tidal Economy

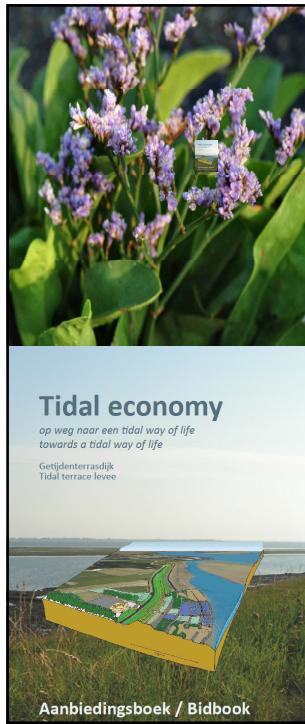
Cross License Pool Tidal Economy

IDEENPOOL



 **ARCADIS**





Towards a Tidal way of life



 ARCADIS