



Flanders
State of the Art

Flanders

Cluster policy

Flanders Innovation and Entrepreneurship

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Interreg Europe Mutual Learning - June 2018

Part I : Institutional Framework

Introduction: Belgian policy framework

Belgium = federal country

Federal government + Regional governments

- **No hierarchy** between the federal and regional governing levels
- **Autonomous execution** by all governing levels, also EU and international (treaties, ...)
- **Science and innovation:** (mainly) autonomous policy competence at the regional level → (Policy) budget of the Flemish government in 2016:
 - ± 40 billion euros overall
 - ± 2.22 billion euros for science and innovation policy across all policy domains
 - ± 1.40 billion euros for R&D in the strict definition

Flanders: main indicators

	Year	unit	Flanders	Belgium	EU-28
Surface area		km2	13.521	30.528	4.381.376
Population	1/1/2015	million	6,44	11,21	508,29
GDP in current prices	2015	billion euros	239,2	409,4	14.693,00
Export	2015	billion euros	300,6	350,6	
GERD	2014	billion euros	5,738	9,875	271,559 (2013)
GDP per capita	2015	euros	32.000	36.500	28.800
Employment rate (20-64 years of age)	2015	%	71,9	67,2	70,0



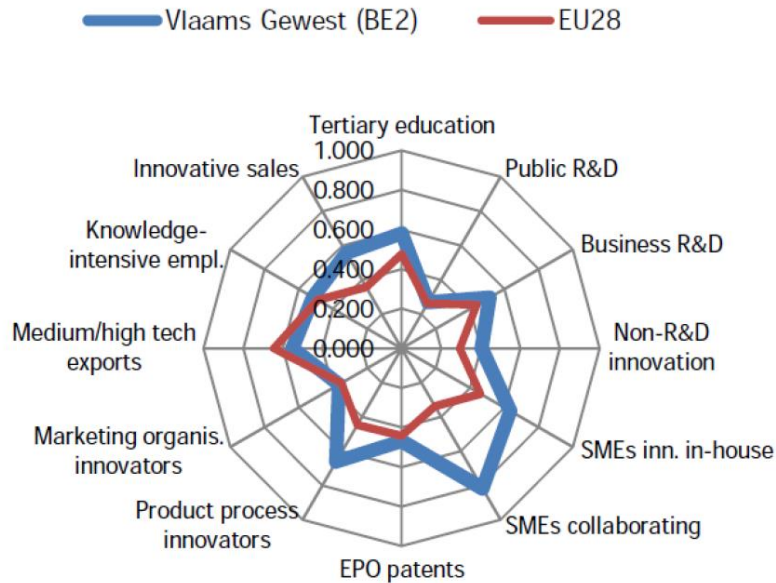
Flanders: economical policy

The coalition agreement for the 2014-2019 Flemish Government

- a **demand-driven** and market-oriented public policy for economy and innovation;
- a **simplification and rationalization** of structures and instruments
- more transparency, better client-friendliness
- a higher focus on **business-oriented innovation and valorisation**,
- strong **knowledge organizations**
- with excellent research and a **growth path for the 3% target for R&D**, with public support strive towards 1% by 2020.

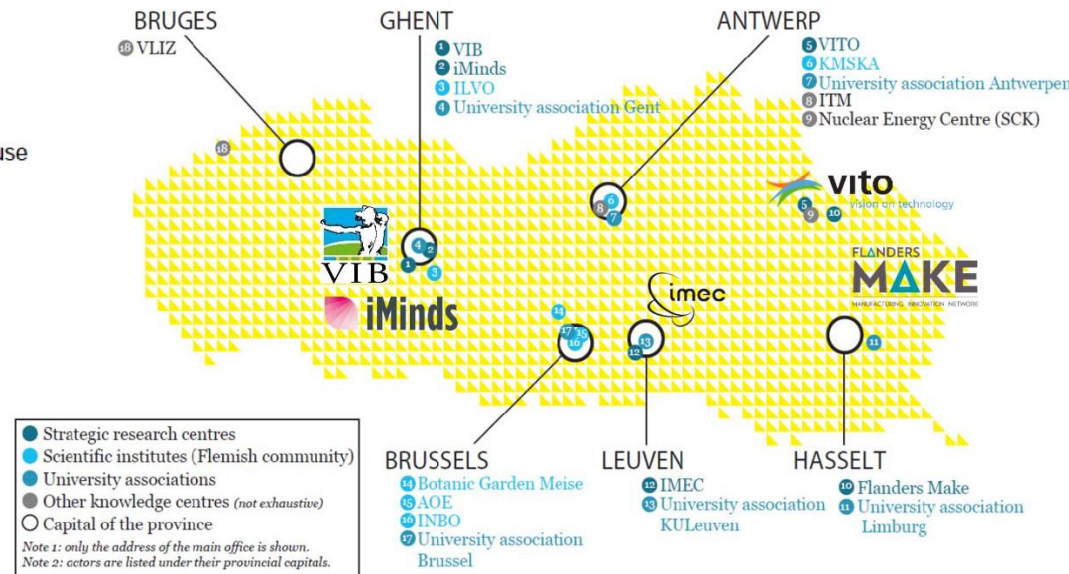


Flanders: R&I



RIS 2016

2014
 public funding/GDP = 1,68%
 private funding/GDP = 0,78%
 total funding/GDP = 2,46



Introduction: Flemish S&I policy framework (1)

Policy priorities for economy and innovation
(Flemish Minister for Work, Economy, Innovation and Sport)

Invest in preconditions for **innovative and industry-driven entrepreneurship**:
developing a programmatic approach for **Smart Specialisation**

- **Cluster Policy: Spearhead Clusters and Innovative Business Networks**
- Vision 2050 (Flanders long-term strategy): 7 Transition Priorities (Ind. 4.0, CE, Energy, mobility, ...)

Invest in an **excellent knowledge base**

- Further develop and support Strategic Research Centres (SRCs)
- Further invest in state-of-the-art research infrastructure

Introduction: Flemish S&I policy framework (2)

The above-mentioned basic principles and policy priorities for economy and innovation provide the policy framework for bringing together entrepreneurial excellence and (bottom-up and top-down) research excellence within a Triple Helix dimension in 10 “centres of gravity”:

- *6 Spearhead Clusters*
- *4 Strategic Research Centres (SRCs)*

Part II : Flanders Innovation and Entrepreneurship

AGENTSCHAP
INNOVEREN & ONDERNEMEN

Flanders Innovation and Entrepreneurship

(Agentschap Innoveren & Ondernemen)

- ▶ **A government agency**
- ▶ **To implement the economic, innovation and enterprise policy**
- ▶ **In Flanders, the Dutch speaking northern part of Belgium.**
- ▶ **Staff: 343 FTE**
- ▶ **Budget: 606 M EUR to support companies in Flanders**

Flanders Innovation and Entrepreneurship

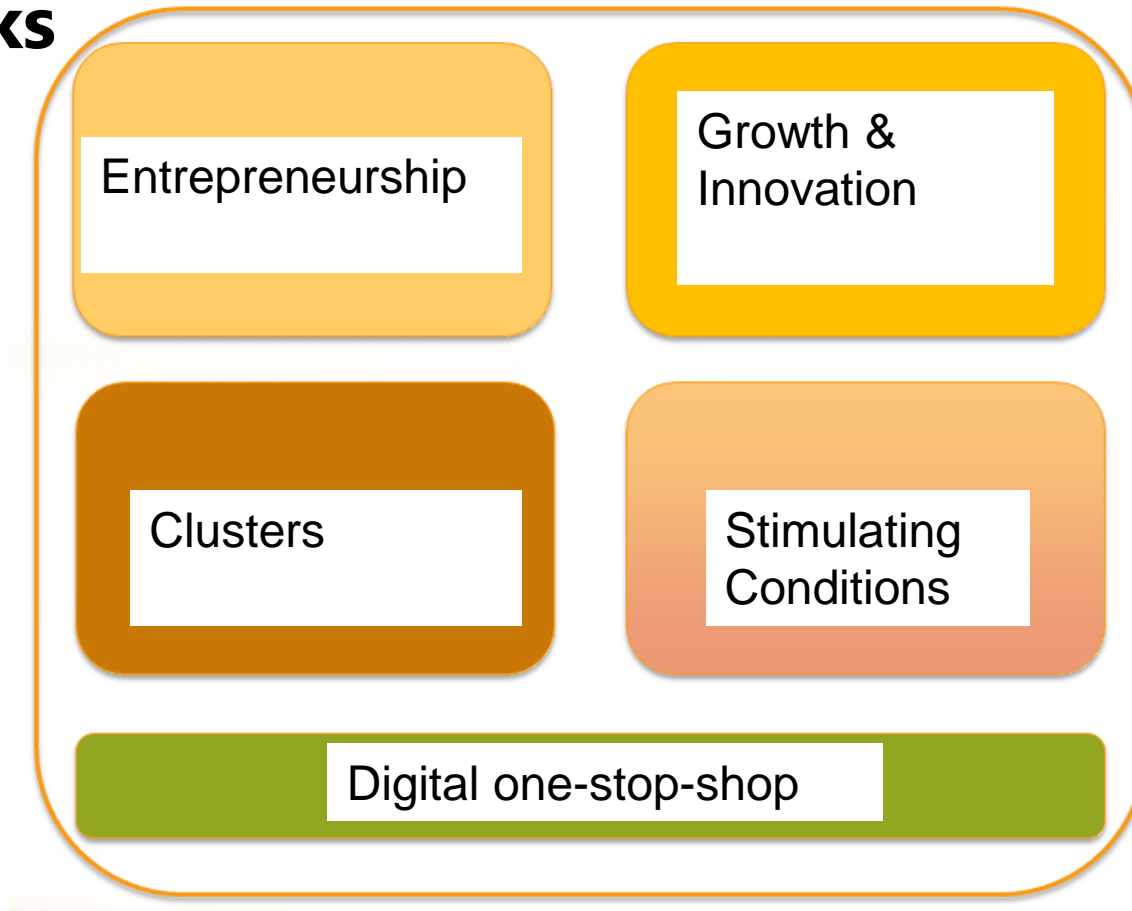
(Agentschap Innoveren & Ondernemen)

We confidentially guide entrepreneurs throughout the government landscape.

- ▶ The startup of their activities,
- ▶ The grow and continuity of their business,
- ▶ The search for information on permits,
- ▶ The search for financing and investments in innovation and ecological technologies

Flanders Innovation and Entrepreneurship (Agentschap Innoveren & Ondernemen)

Main tasks



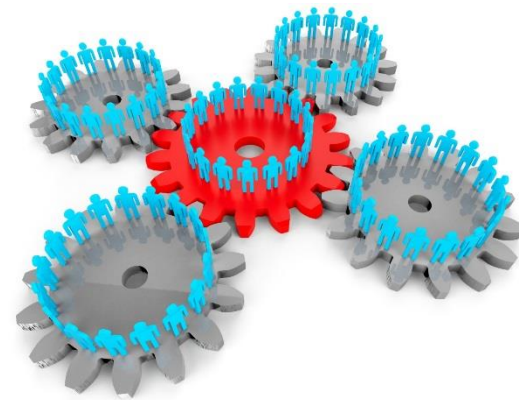
Flanders Innovation and Entrepreneurship (Agentschap Innoveren & Ondernemen)

Partnerships with:

- ▶ Sector and business organisations
- ▶ Flanders DC (creativity)
- ▶ **Clusters**

Part III : Flanders Cluster Policy

Cluster policy : ambition

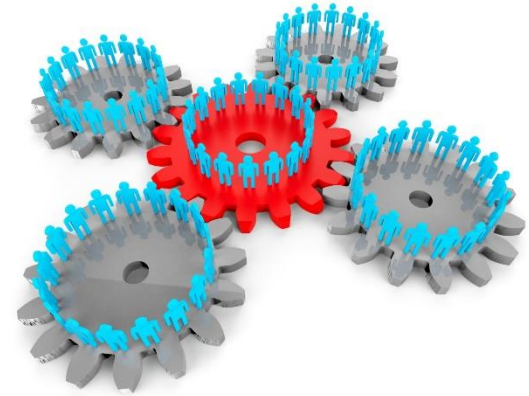


➤ **Goal:** Unlock untapped economic potential and increase competitiveness of companies in Flanders through an active and sustained **collaboration** between all actors

➤ **clusters**

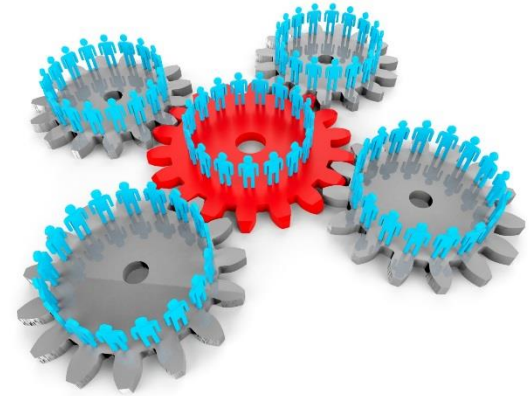
- can contribute to solving societal challenges
- are expected to achieve concrete results
- economic value is defined as investments, job creation, increased export, cost reductions,...
- will replace existing competence centers and smaller actions, and will be complementary to the Strategic Research Centers (imec+iMinds, VIB, VITO, Flanders MAKE)

Flanders cluster program



- Funding of cluster organisations (50%)
 - Decree of the Flemish Government of 4 March 2016 “Support to innovation clusters”
 - In line with General Block Exemption Regulation “support to innovation clusters “
- One of the components of economic and innovation policy
 - Implemented by Flanders Innovation and Entrepreneurship
 - Total agency budget: 606 mio€
 - R&I support, business support, business creation, investments, brownfield, incubators, support entrepreneurship,

Flanders cluster program



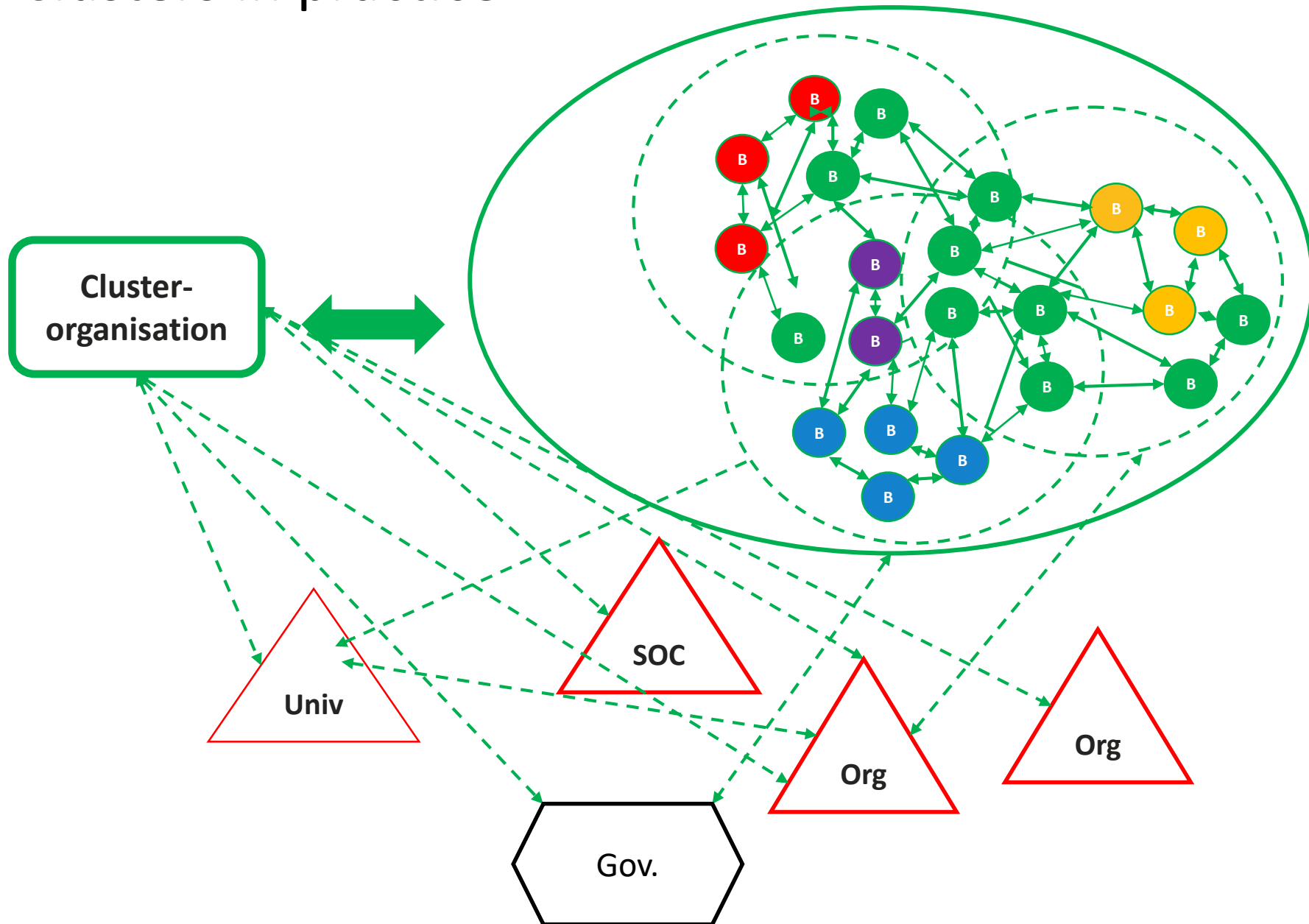
Characteristics

- **companies** in “driver’s seat”
- a strong focus on active **collaboration** in all activities
- clear goals and clear **competitiveness program** to reach goals
- **knowledge creation as a means** to result in increased competitiveness and economic value creation
- clear (financial) **commitment** from the companies
- clusters are **bottom-up** initiatives

Cluster support scheme

Spearhead clusters (6)	Innovative business networks (14 +6)
<ul style="list-style-type: none"> • Cluster organisation as facilitator • Removal of obstacles for growth • Activities along the innovation spectrum (all TRL-levels) <ul style="list-style-type: none"> • Initiate collaboration inside and outside cluster 	
Strategic domain	Bottom up
Ambitious, large scale	Smaller scale
Long term vision – intermediate results	Short term results
Triple helix (comp, KI, gov)	All relevant actors, focus on businesses
Contract based on comp. progr.	Contract based on action plan
Commitment of all partners in clusterpact	
Max 10j, max 500 k€/y funding	Max 3j, max 150 k€/y funding
50% private investment	50% private investment

Clusters in practice

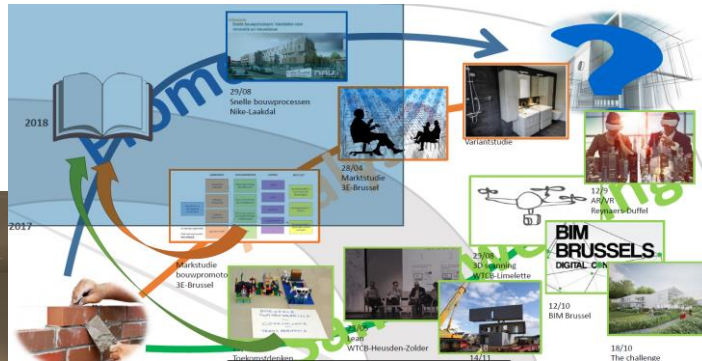


VLAIO support to clusters

1. Financial support to cluster organisation (facilitator)

2. Supporting role from the government/agency

- Account manager – link to government
- Training (ESCA-label) - optional
- Peer learning



IBN	Soortenc / successverhaal
PSG	{ Mea inbrengt ^{inbrengt / investeert} vanuit leden: beschikbare middelen IP / Confidentialiteit ROAD MAP
FLAG	
COTAINES	COFINANCIERING - "VOLUNT KORTINGEN" - projecten RELATIE TOT SPG'S
OFF SHORE	
EUKA	IK INNOVER STAGES Projecten financieren (lezen, onderzoeken, ontwikkelen)
BOW- INNOVATIESTRATEGIE	



EUKA-Aktivitäten



WETGEVING

WE INFORMEREN ONZE LEDEN
OVER DE REGELGEVING ROND
DRONES EN GEVEN
BELEIDSADVIES OP BASIS VAN
HUN INPUT AAN DE OVERHEID



MATCHMAKING

ZOWEL ONLINE VIA SOCIAL MEDIA
ALS OFFLINE VIA LERENDE
NETWERKEN, EVENEMENTEN EN
OPLEIDINGEN ZETTEN WE IN OP
HET BIJ ELKAAR BRENGEN VAN
ALLE STAKEHOLDERS IN DE
DRONE-INDUSTRIE.



VAN IDEE TOT MARKT

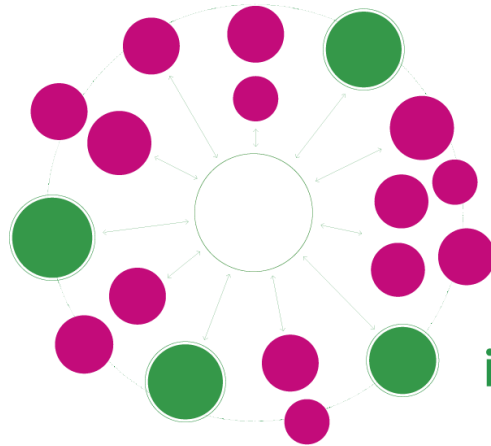
WE FACILITEREN DE
VERSCHILLENDE COMMUNITYS
OM IDEEËN TE GENEREREN EN UIT
TE WERKEN TOT EEN
MARKTKLAAR PROJECT.



INTERNATIONALISEREN

VIA BUITENLANDSE MISSIES EN STANDS OP BEURZEN BRENGEN WE DE VLAAMSE DRONE-INDUSTRIE DE WERELD ROND.

Results after 1 year cluster support (2017)



Samen

voor sterk
innoveren en groeien



5
SPEERPUNTCLUSTERS

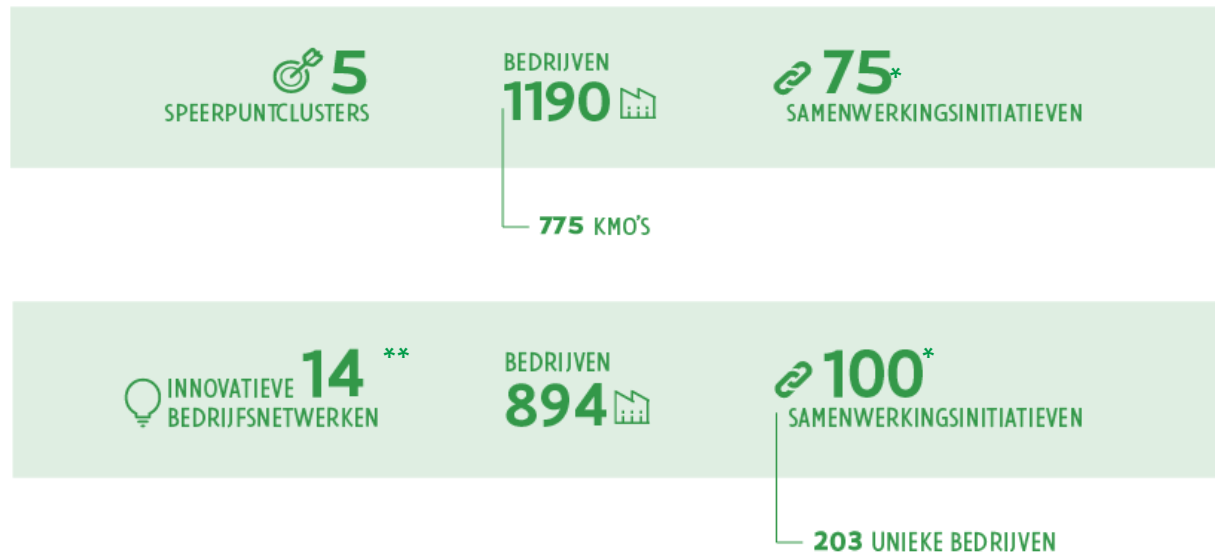
INNOVATIEVE
BEDRIJFSNETWERKEN

14

BEDRIJVEN

>2000

Collaboration inside clusters (between members)

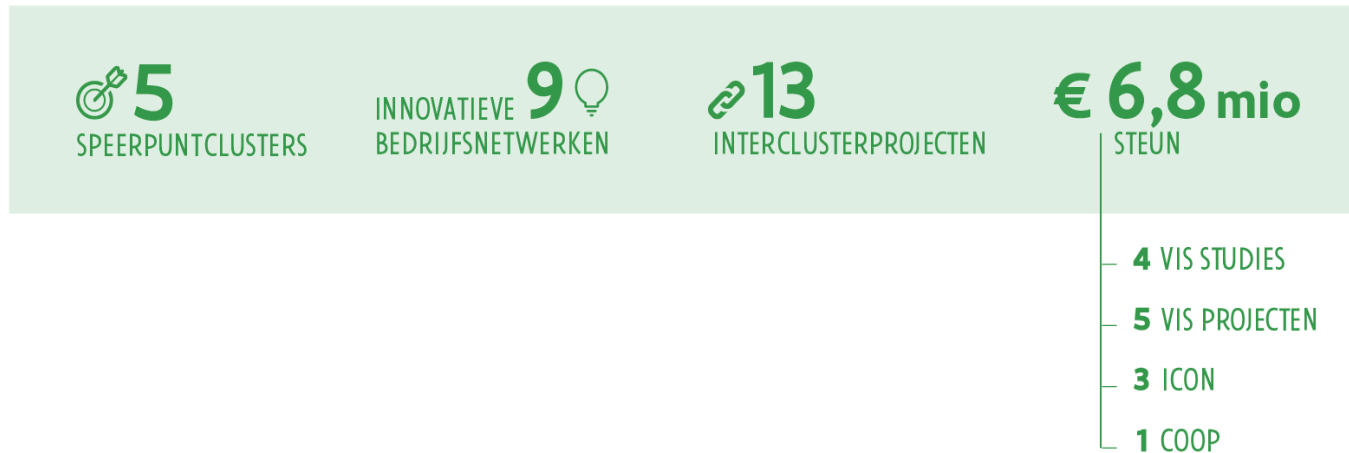


*samenwerkingsinitiatieven: initiatieven – zowel gesubsidieerde projecten als andere - waarbij minstens 3 bedrijven betrokken zijn

** op basis van rapporten van 10 innovatieve bedrijfsnetwerken en 5 speerpuntclusters

Collaboration between clusters

Call for projects from VLAIO (intercluster projects)



Spearhead Clusters



Catalisti – cluster for sustainable chemistry



SIM – Materials innovation



VIL – Smart Logistics



FLUX50 – Smart Energy region



Flanders' FOOD – cluster for agrofood








Recently approved

Blue Cluster – Maritime and Marine Industry

Innovative business networks

 <p>AGENTSCHAP INNOVEREN & ONDERNEMEN</p> <p>Groen Licht Vlaanderen</p> <p>Samen voor sterk innoveren</p>	<p>Groen Licht Vlaanderen - Netwerk voor digitalisering en duurzame geconnecteerde LED verlichting</p>
 <p>AGENTSCHAP INNOVEREN & ONDERNEMEN</p> <p>AirCargo Belgium</p> <p>Samen voor sterk innoveren</p>	<p>Aicargo Belgium - Netwerk voor luchtvrachtsector</p>
 <p>AGENTSCHAP INNOVEREN & ONDERNEMEN</p> <p>DRONE EUKA</p> <p>Samen voor sterk innoveren</p>	<p>EUKA - Netwerk voor drone aanbieders en gebruikers</p>
 <p>AGENTSCHAP INNOVEREN & ONDERNEMEN</p> <p>FLAG</p> <p>Samen voor sterk innoveren</p>	<p>FLAG - Netwerk voor luchtvaartindustrie</p>
 <p>AGENTSCHAP INNOVEREN & ONDERNEMEN</p> <p>Flanders BikeValley</p> <p>Samen voor sterk innoveren</p>	<p>Flanders Bike Valley - Netwerk voor fietsindustrie</p>
 <p>AGENTSCHAP INNOVEREN & ONDERNEMEN</p> <p>Smart Digital Farming</p> <p>Samen voor sterk innoveren</p>	<p>Smart Digital Farming - Netwerk voor digitale toepassingen in de landbouw</p>
 <p>AGENTSCHAP INNOVEREN & ONDERNEMEN</p> <p>B-HIVE</p> <p>Samen voor sterk innoveren</p>	<p>B-HIVE - Netwerk voor fintechsector</p>

Innovative business networks

 <p>Samen voor sterk innoveren</p>	Bouwindustrialisatie - Network for industrialisation of building sector
 <p>Samen voor sterk innoveren</p>	BIM - Network for building information models
 <p>Samen voor sterk innoveren</p>	Offshore Energie - Network for offshore energy companies (wind, golfslag, getijden)
 <p>Samen voor sterk innoveren</p>	Power to Gas - Network hydrogen applications
 <p>Samen voor sterk innoveren</p>	Innovative Coatings - Network for coating industry
 <p>Samen voor sterk innoveren</p>	Composieten - Network for composite industry
 <p>Samen voor sterk innoveren</p>	Digitising Manufacturing - Network for digitalisation in the industry

Contact information : www.vlaio.be/clusters



Clusterorganisaties faciliteren een netwerk van bedrijven - actief in een bepaald domein - die door middel van onderlinge samenwerking en samenwerking met kennisinstellingen hun competitiviteit wensen te verhogen.

Clusterorganisaties kunnen voor de uitvoering van hun rol als facilitator financieel ondersteund worden door de Vlaamse overheid. Met een steunpercentage van 50% dienen de bedrijven jaarlijks een equivalent bedrag aan cofinanciering te verzamelen voor de werking van de clusterorganisatie.

Het Vlaams clusterbeleid onderscheidt twee types van clusters, de [speerpuntclusters](#) en de [innovatieve bedrijfsnetwerken](#).

<http://www.vlaanderen.be/nl>

Case 1: Modernisation

Digital technologies in Building industry



*“New insights in
tomorrow's constructions”*

Crucial issue:

Can the construction process be
better / faster / more efficient / different?

YES!



We can draw inspiration from
“making processes / production
processes”!



Low margins

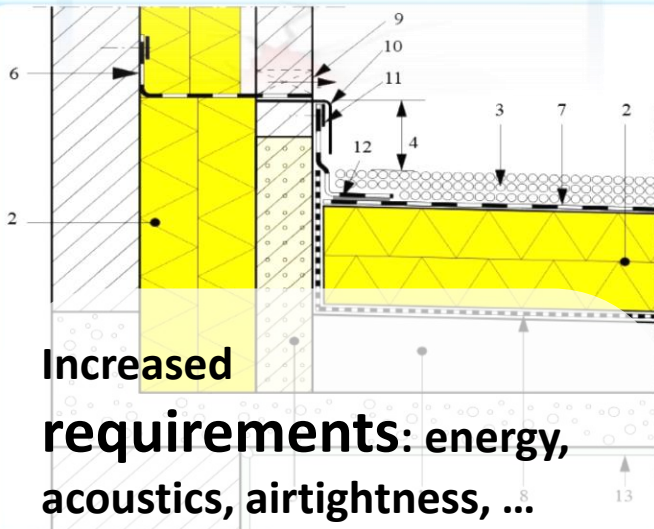


**Difficult
site conditions**



Labour-intensive

Enough **motives** ...

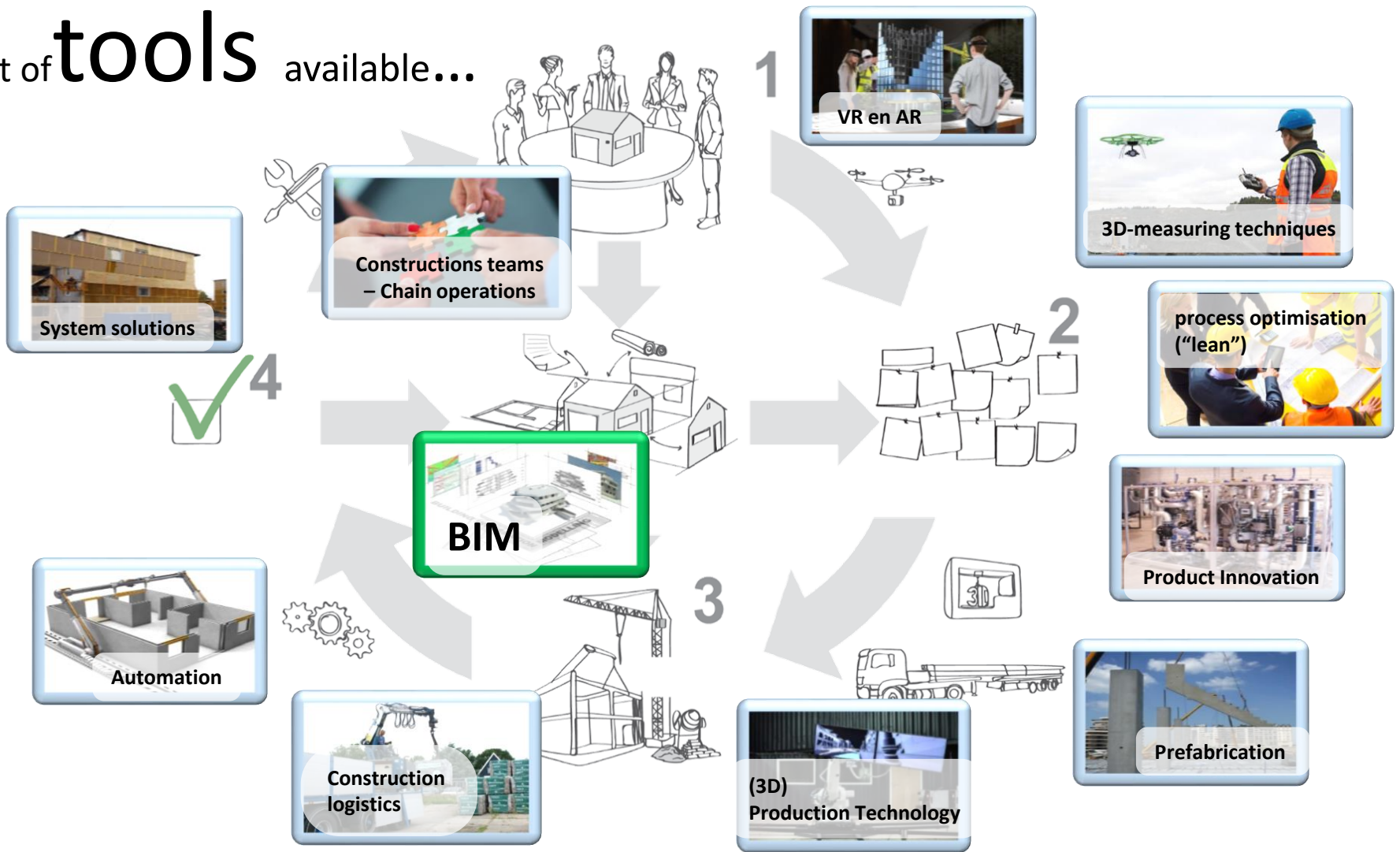


**Increased
requirements: energy,
acoustics, airtightness, ...**

Defects / Problems on construction sites, ...
quality/costs of failure



Lot of **tools** available...



Onze clusterleden



KULAPRO
CONSTRUCTIE EN ONTWERP
VIRTELENDE BOUW EN ONTWERP



custombuild



DYKA



KIJK & BOUW

Promat



IFTECH



Promat



GEBERIT



SIBOMAT



beSteel



Case 2: Transition - Sustainable Chemistry

Bio based Europe

- Largest petro-chemical cluster in Europe in Flanders; strong links with food, building e.o. sectors; cross-border links with NL and DE
- Transition towards bio-based economy, but incomplete science base!
- How to become a world-class cluster in sustainable chemistry?
- Focus on strategic **road mapping** for a transition (also cross-border!)

Some Instruments

- Shared vision between NL – NRW – Flanders
- KET Roadmap
- Lead companies : Procter Gamble, BASF, Bayer, Afga, ...
- **Spearheadcluster CATALISTI**
- Pilot plants
- Incubator
- DG REGIO : ERDF and Interreg
- JTI BBI

7 Innovation roadmaps



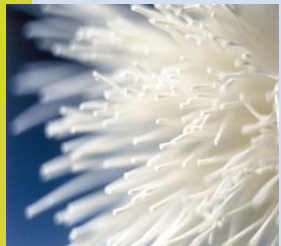
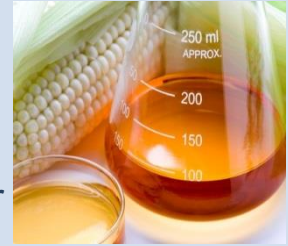
Micro
Algae

Miniature chemical factories

Resources

Renewable
Chemicals

Using nature's power



Separation
Technology

Purity is the name of the game

Processes

Microproces
Technology

The smaller, the more efficient



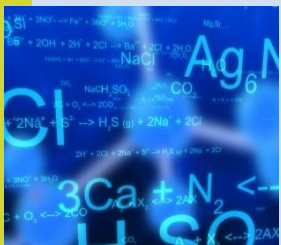
Polymer
Recycling

Reusing polymers forever

Products

Sidestream
Valorization

Waste becomes resource



Knowledge
Tools

Knowledge is power

Assessment

Ambition = Multiregion approach

Bio-economy clusters VI-NI-NRW

