

Biobased Economy in Netherlands

**Brief overview and
info on Green Deal Approach**

**studio
Gear Up**

28 November 2017

Scaling Up Conference 2017
Ottawa, Canada





About the Netherlands approach on biobased economy

- **Entry point to Europe**
- **Hot spot on agroindustrial, (petro)chemical, logistics and transport activities**
- **Relevant R&D and knowledge institutes on life sciences and biobased**
- **Quite a a lot biobased pioneers**
- **Strong governmental committment on GREEN GROWTH**
- **International orientation**
- **But: In need of feedstocks**



International collaboration w.r.t. biobased economy in NL



Some current projects:



H2020:
BioForEver
Pulp2Value
Embraced



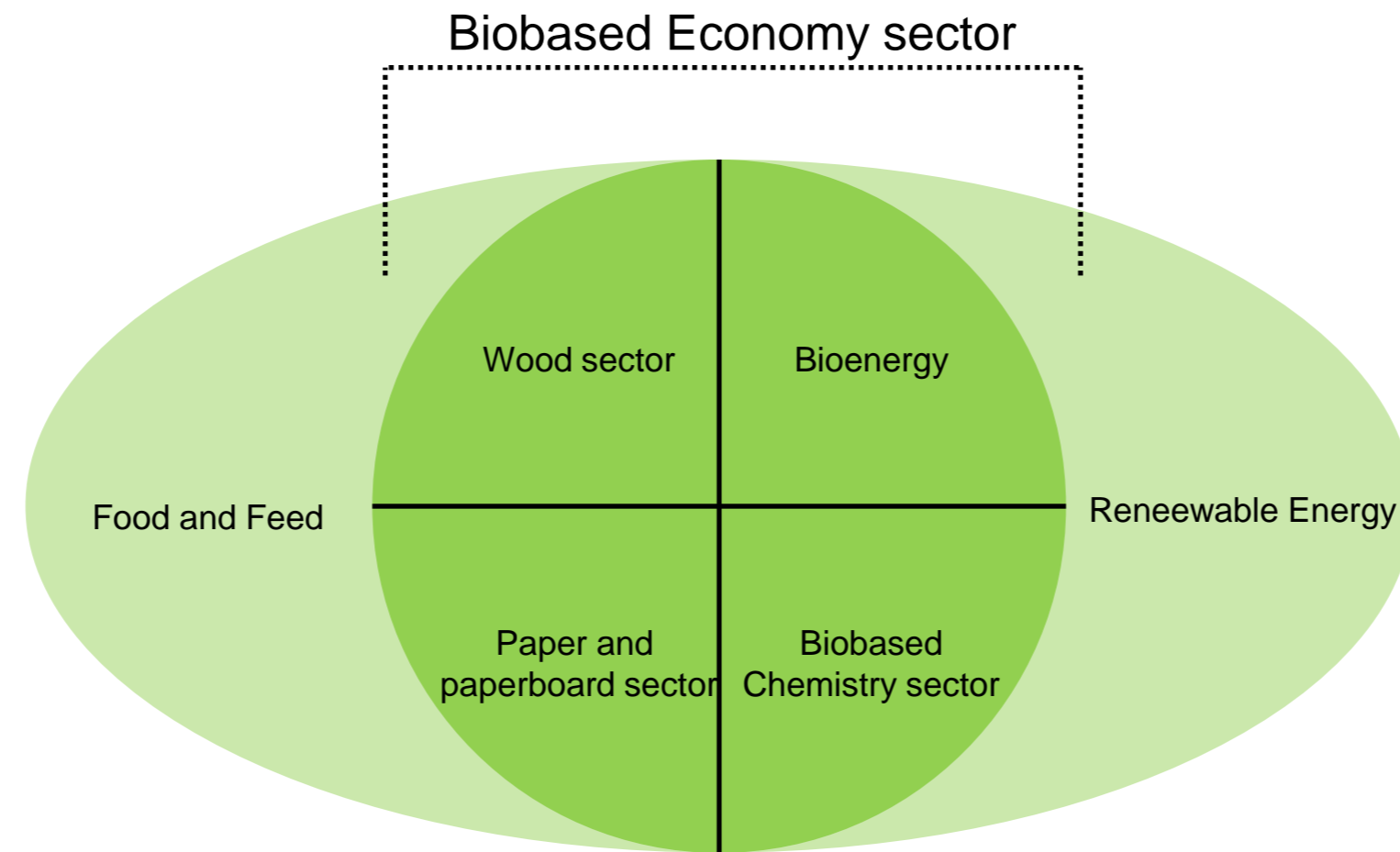
avantium Company Corporate governance Investor relations

Avantium takes next step and signs contract with AkzoNobel for pilot biorefinery in Delfzijl

18 Jul 2017 | 2017, Press releases

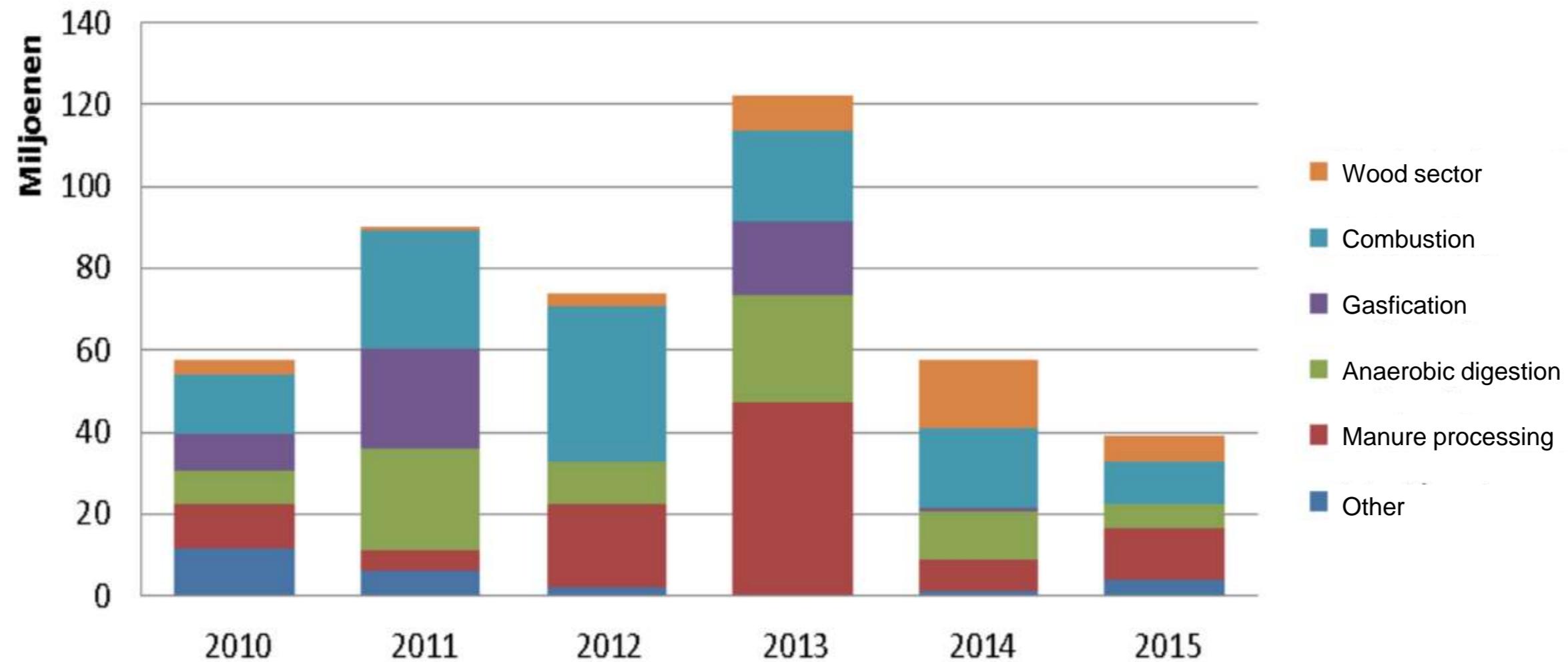
Amsterdam, 18 July 2017 – Avantium, a leading chemical technology company and forerunner in renewable chemistry, locates a new pilot biorefinery at Chemie Park Delfzijl, the Netherlands. Avantium and AkzoNobel have signed a contract for the pilot plant accommodation and the supply of various facilities and services.

Brief overview on biobased economy situation in NL



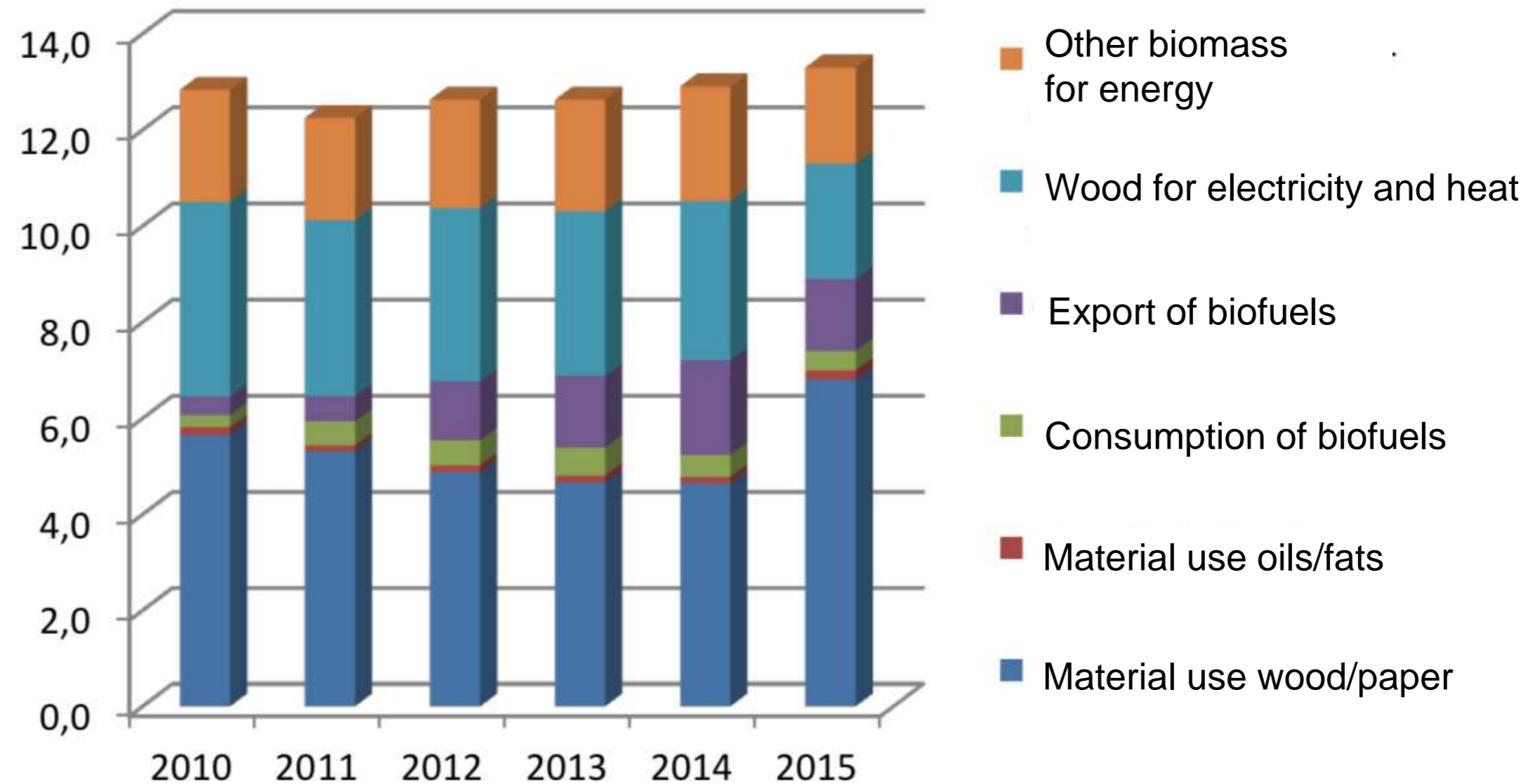
Development in (subsidy supported) investments in recent years

Total investment per conversion technology for which investment support was given



Biomass is used equally for energy and materials...

Amount of biomass feedstock used in BBE in NL (in million dry ton)



... though we see a slow rise of material use



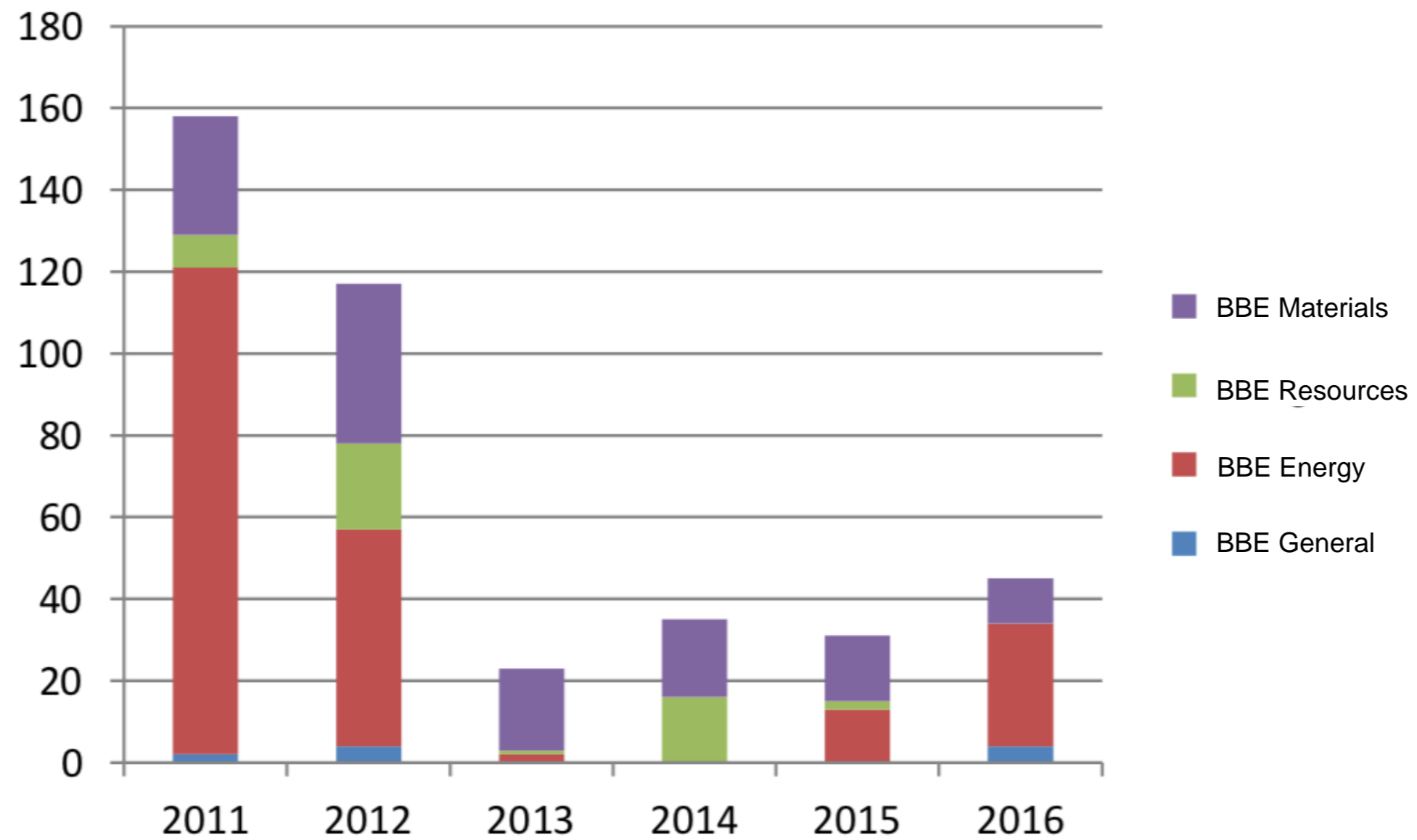
Context: Nederland chooses for green growth

- Ambition: an economy that grows without negative impacts for climate, water, soil, resources and biodiversity
- Society develops sustainable plans and takes initiative
- Government offers helping hand
- Closely connected to policy on Green Growth, Energy & Climate and Biodiversity
- Total: **217 Green Deals** (August 2017)



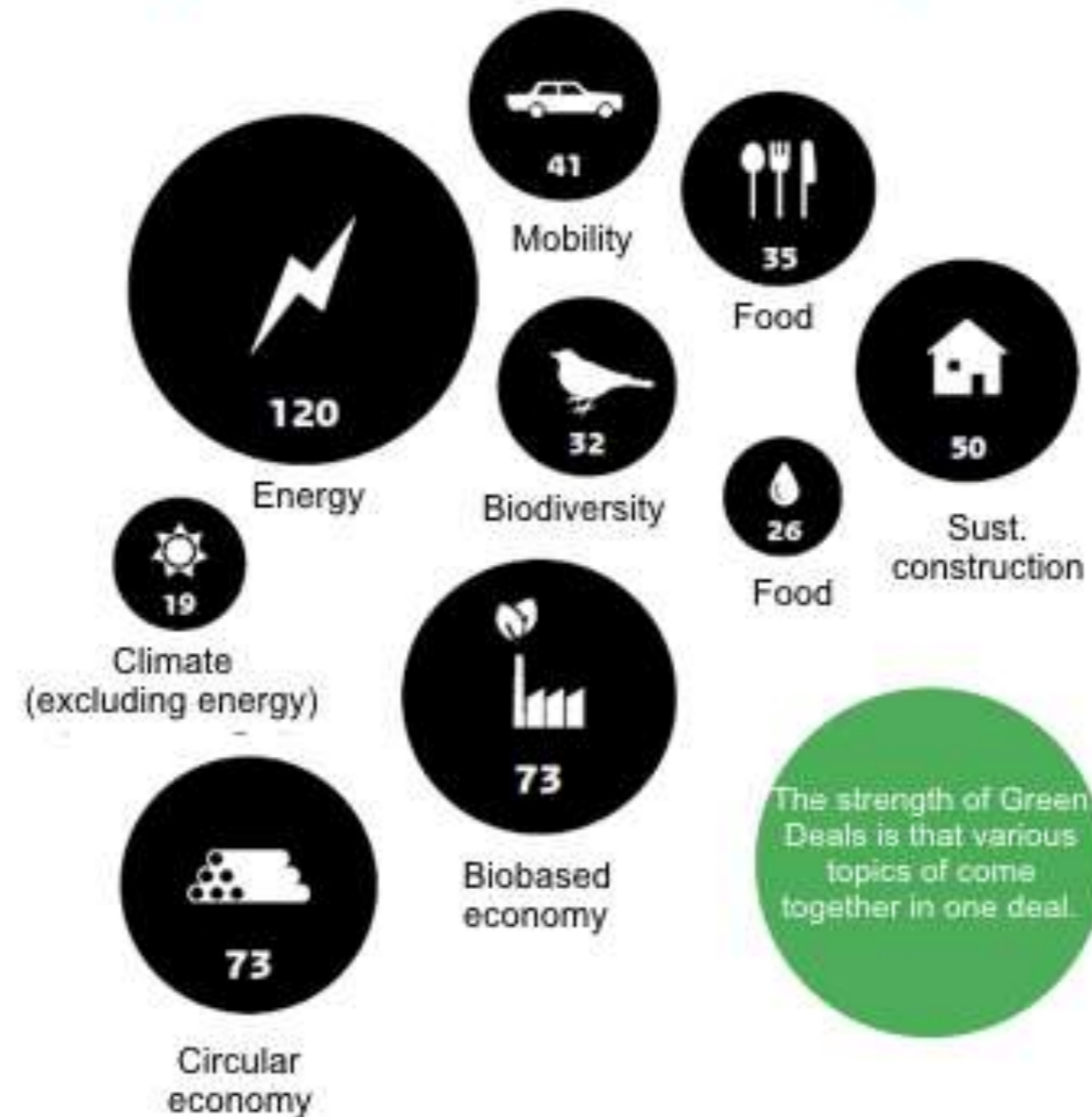
Netherlands introduced Green Deals in 2011...

Number of actions mentioned in Green Deals (a GD can contain more actions)



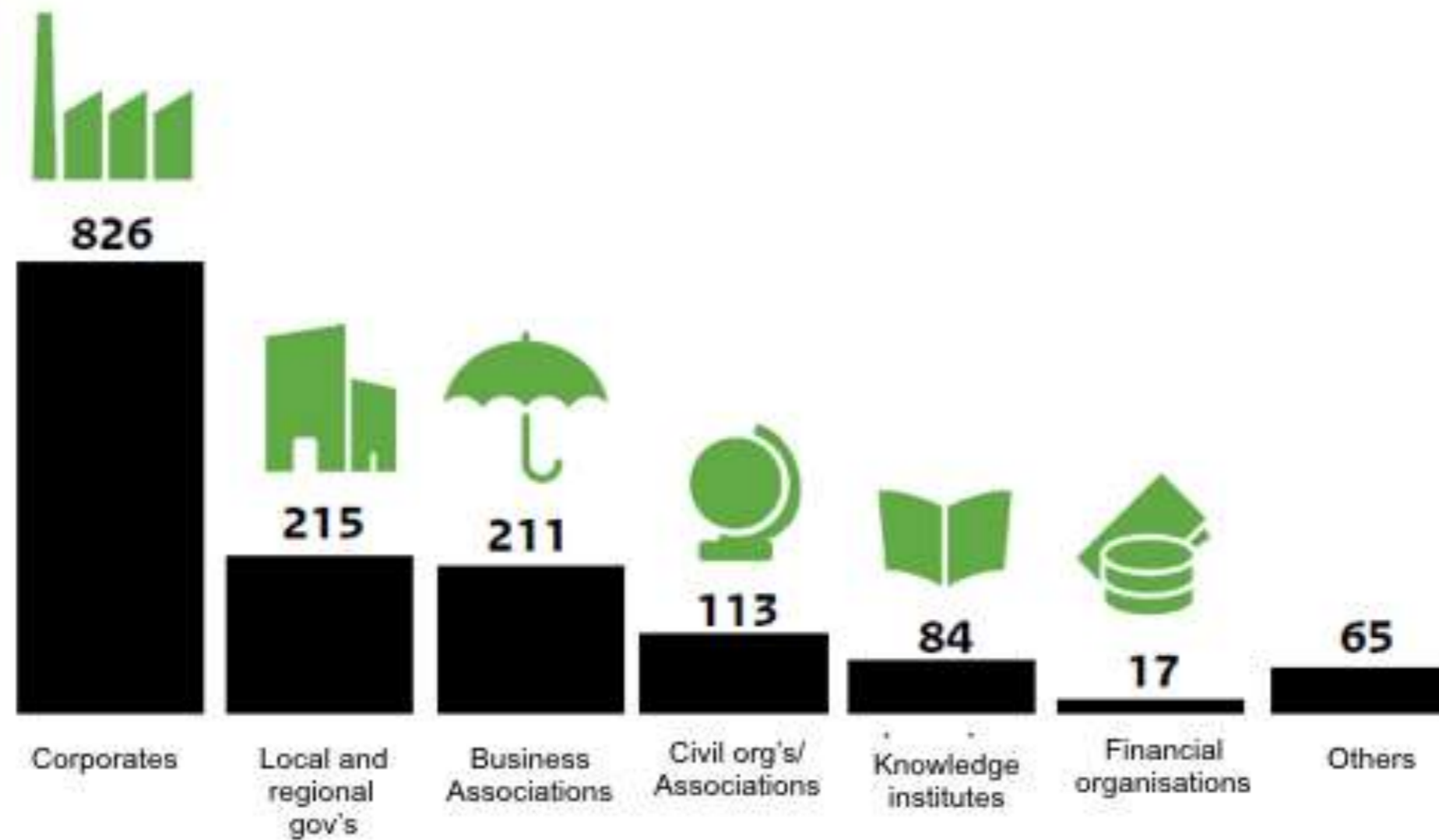


Coverage of topics of all deals up to end of 2016





Participating organisations (excl. nat. government)





Core of Green Deal approach

- Impact on green and growth
- Topics: energy, climate, resources, water, biodiversity, biobased economy, mobility, food and construction
- Deals are path-openers for large-scale application (Scale-Up)
- A Green Deal is a tailor-made covenant between market players and national government
- Fits in the 'participating society'
- Government as network partner





Roles of initiative takers and nat. government

Initiative takers:

- Develop a detailed plan and find partners
- Bring the initiatives to execution stage
- Contribute to the scaling up

National government:

- Eliminate barriers in regulation
- Support market development
- Strengthen networks
- Improve access to capital



Who can start new Green Deals

Targeted stakeholders:

- Companies, civil societies, regional governments, Water councils, municipalities, knowledge institutes, associations.

Application via two tracks:

- The network of ministries (Economic Affairs and Climate, Infrastructure & Water Management, Interior and Kingdom Affairs)
- The Netherlands Enterprise Agency



Judgement criteria for Green Deal initiatives

The initiative:

- Has a clear objective for sustainable development
- Is profitable or potential to become profitable
- Has a quantifiable impact on green growth
- Is inspiring and has potential for scale up or expansion
- Experiences market entry barriers
- National government can help to overcome these barriers
- Will lead to result within timeframe of 3 years
- Has added value as compared to earlier, similar deals
- Is executed actively by the initiative taker
- Is possible to realise (from a technical perspective)

Thank you for your attention

Eric van den Heuvel
Johann Siegerstraat 20
1096 BH Amsterdam, the Netherlands
+31-6-83223098
eric.vandenheuvel@studiogearup.com

studio
Gear Up

28 November
2017

Scaling Up Conference 2017
Ottawa, Canada