

ISCOWA

**WASCON 2009**

**3-4-5 June 2009 in Lyon - France**

*"Sustainable Management of Waste and Recycled Materials in Construction"*



# Concrete with granulates

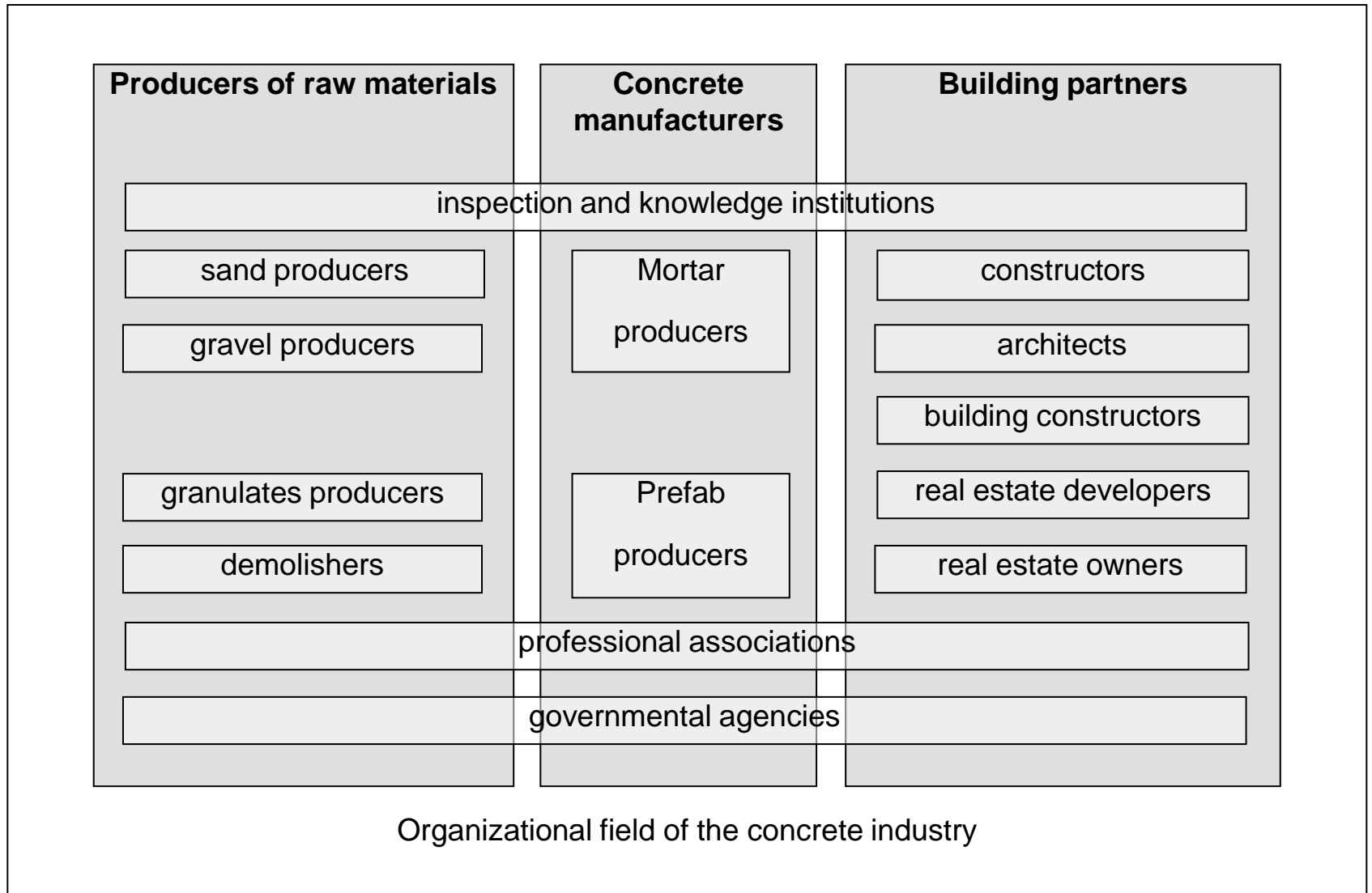
Heleen Lieftink | de Kok & partners, The Netherlands

# CONCRETE WITH GRANULATES

- Introduction
- Concrete with granulates
- Causes
- The main question

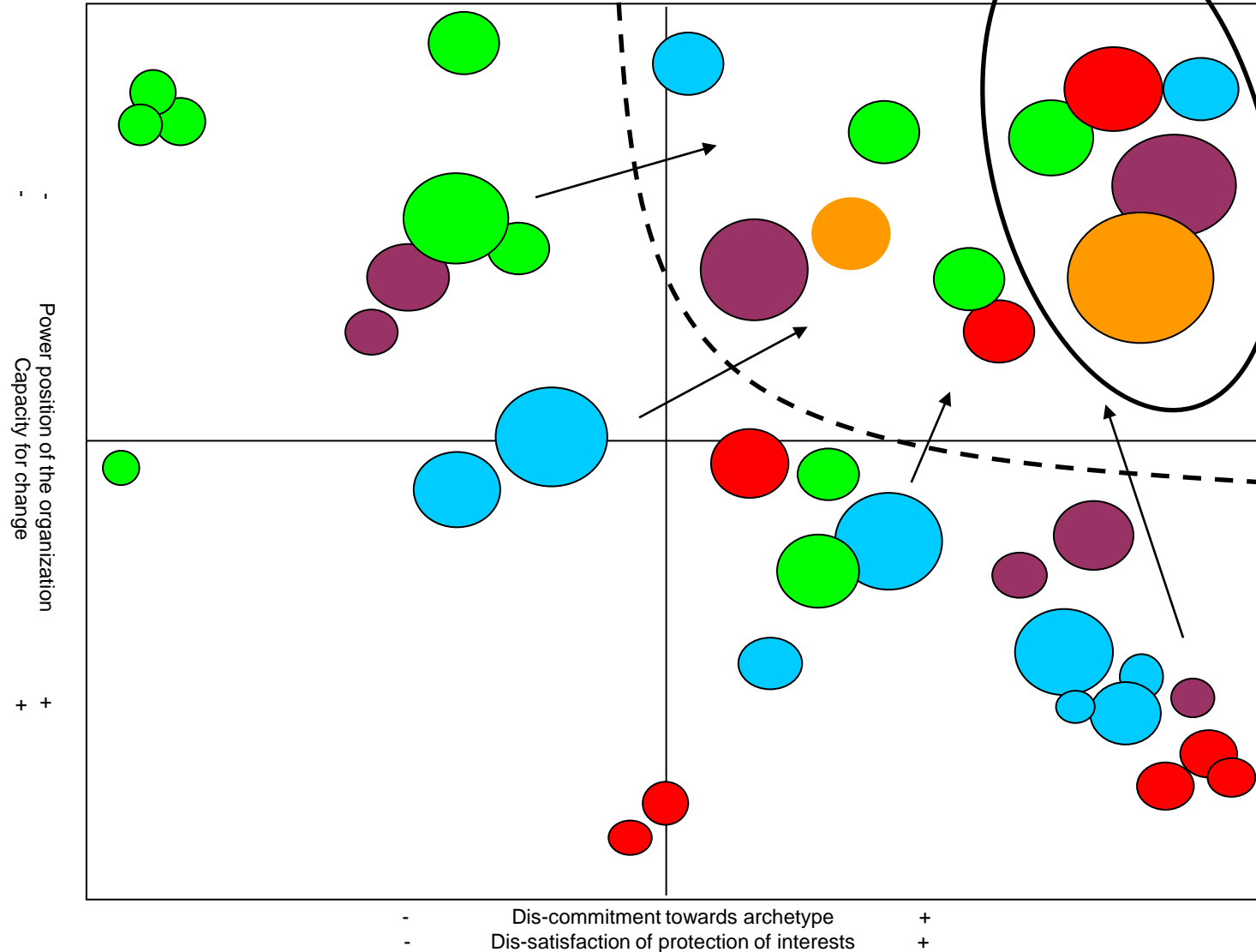


# STAKEHOLDERS



- Producers raw materials
- Concrete manufacturers
- Building partners
- Professional associations
- Governmental agencies

## Commitment towards archetype vs. Capacity for change

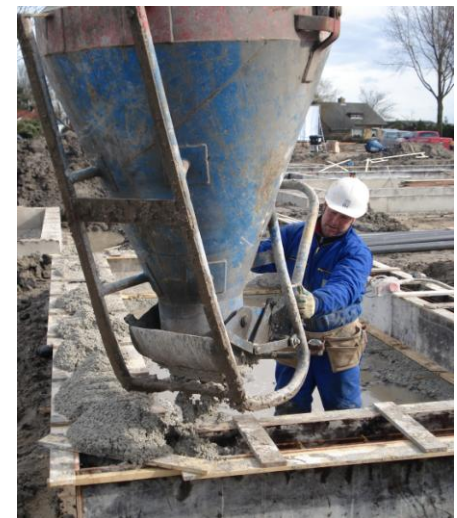


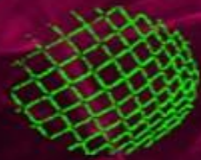
# FUTURE OPPORTUNITIES

| <b>ACTOR</b>                  | <b>ROLE</b>                       | <b>POSSIBLE ACTIONS</b>  |
|-------------------------------|-----------------------------------|--|
| Government                    | Legislator                        | Clear policy with compulsory industrial standards  |
|                               | Client                            | Use of concrete with granulates for all building projects  |
|                               | Controller                        | Control the use of concrete with granulates  |
|                               | Research                          | Research on concrete with higher granulates percentage   |
|                               | Education                         | Show the possibilities of granulates in concrete   |
|                               | Promotor environment              | Promote the use of granulates as substitute<br>Cooperation in environmentally friendly projects  |
|                               | License procurer                  | Limit future extractions of sand and gravel  |
| Professional association BRBS | Promotor concrete with granulates | Demonstrate availability granulates is no problem<br>Demonstrate quality granulates is no problem  |
|                               | Research                          | Research on concrete with higher granulates percentage   |
| Granulates producers          |                                   | Organisational policy with attention for environment<br>Sell granulates at competitive price<br>Use control mark to prove the required quality |
| Concrete producers            |                                   | Organisational policy with attention for environment   |
| Building partners             |                                   | Organisational policy with attention for environment<br>Use financial loan construction  |

# CONCRETE WITH GRANULATES

- Governmental role
- Conclusion and recommendations
  1. Create **economic and/ or social fitness** with the use of granulates in new concrete.
  2. **Make a good analysis of the sector.**
  3. Make a clear and consistent **content of the new standards and criteria.**
  4. Develop **control instruments** in cooperation with the stakeholders.
  5. **Make the context clear of the new situation.**
- Recycling results in significant environmental, social and economic benefits
- Any questions?
- International Recycling Federation:  
[www.fir-recycling.com](http://www.fir-recycling.com)





ISCOWA

# WASCON 2009

3-4-5 June 2009 in Lyon - France

*"Sustainable Management of Waste and Recycled Materials in Construction"*



## Concrete with granulates

de Kok & partners

Arnhem, The Netherlands

heleen@dekok-partners.nl

[www.dekok-partners.nl](http://www.dekok-partners.nl)

[www.granulaatbeton.nl](http://www.granulaatbeton.nl)