

APB Kamp C

Centre for sustainability and innovation
Province of Antwerp





WELCOME

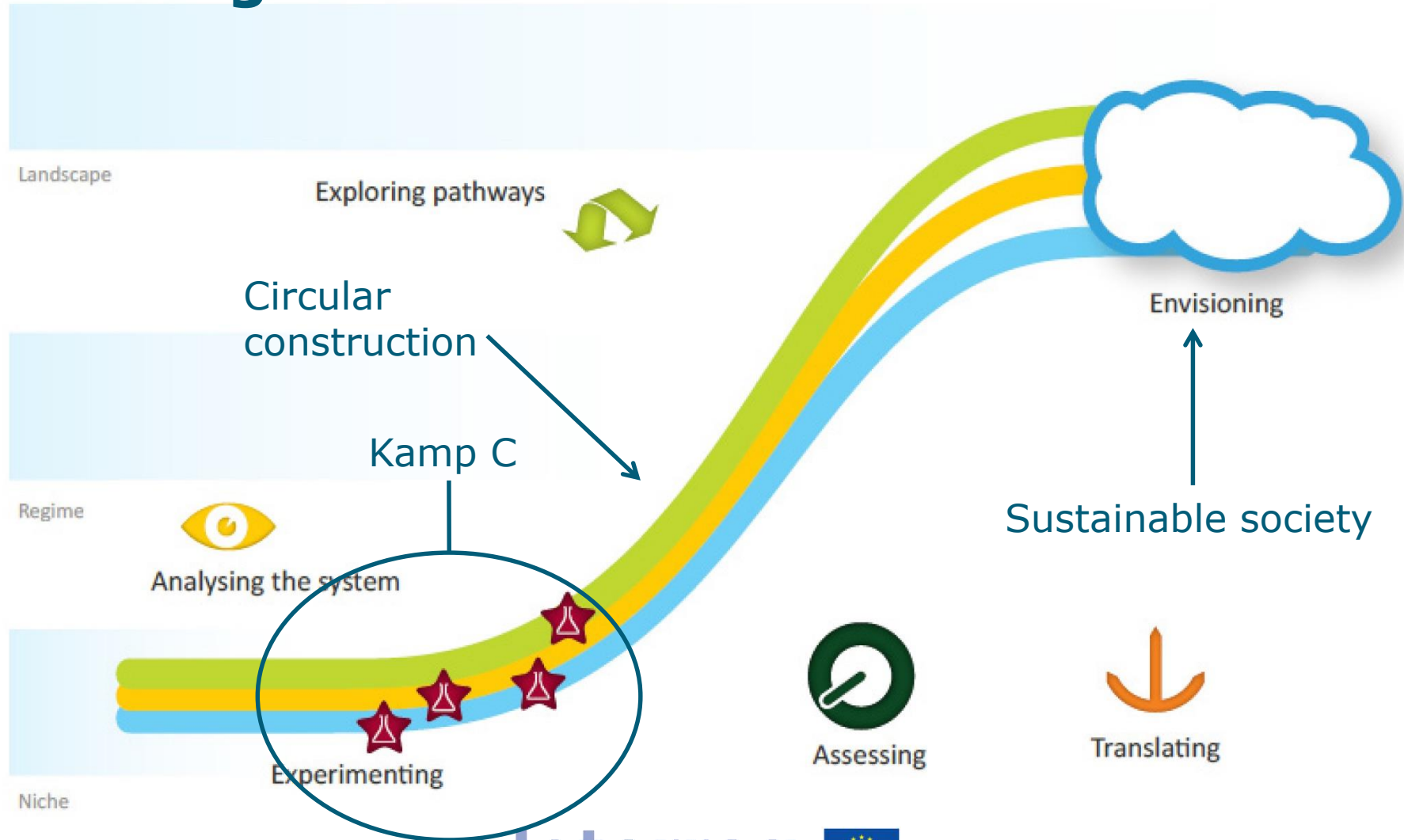
*Thank you for joining
us today!*

Kamp C is a nutshell

- Vision driven,
- **Transition driven,**
- Clear focus: the built environment, the construction sector,
- Target audience: (local) governments, citizens, construction companies, education and knowledge institutions
- Various projects:
 - 3D printing
 - Circular procurement and construction
 - Renovation



from thought to action



Circular economy

Disruption in the construction industry!?

What?

How?

Who?



Circular economy

Disruption in the construction industry



Circular economy

Disruption in the construction industry

Circular area development

Organize an area on the basis of available material, residual-, waste- or energy flows so that surpluses or waste from one serves as input for the other.



CIRCULAIRE
GEBIEDSONTWIKKELING

Circular economy

Disruption in the construction industry

Circular Design

Design a building and its components in such a way that the building is dynamic, convertible, modular and functions as a temporary material bank.



CIRCULAIR
ONTWERPEN

Circular economy

Disruption in the construction industry

Circular materials

Materials that can be re-grown, that are reusable, up- or recyclable and are used in a “pure” way, so they remain in the cycle as long as possible.



CIRCULAIRE
MATERIALEN

Circular economy

Disruption in the construction industry

Circular business models

Purchase products as a service whereby the producer remains the owner and is therefore responsible for maintenance, energy consumption and return.



CIRCULAIRE
BUSINESSMODELLEN

Circular economy

Disruption in the construction industry

Circular Financing

Forms of financing via total cost of ownership, life cycle cost, investments that are paid for by savings or earnings in time, deposit on materials and leasing formulas.



CIRCULAIRE
FINANCIERING

Circular economy

Disruption in the construction industry

Circular working

Offer workspace as a service. The office is open and dynamic with high-tech support. Communication and connection with other employees and companies are key.



HET NIEUWE
WERKEN

Circular economy

Disruption in the construction industry

Circular Procurement

A package of openly formulated ambitions with a fixed budget challenges the market to form building consortiums and to come up with innovative building solutions themselves.



CIRCULAIR
AANBESTEDEN

Circular economy

Disruption in the construction industry



't **CENTRUM**



HOW
ABOUT
YOU!



Question 1

Circularity and circular economy has many possible definitions.

How would you, as a procurer, translate your circular ambitions when first approaching the market?

How will you make sure your (potential) candidates understand what you want to reach? How do you involve them?



't Centrum – ambitions & market approach

- Internal sessions to make a vision and ambition document about the project,
- First 'translation' was tested with a stakeholdergroup,
- 5 Masterclasses about circular construction and our 7 pillars:
 - Inspiration,
 - Knowledge sharing,
 - Call for action,
 - Networking (guided & not guided).

Masterclasses



Masterclasses



Masterclasses



't Centrum – ambitions & market approach

- Information session after publishing selection guide,
- Selection guide contained summary of vision and ambitions,
- Information session after publishing award guide,
- Award guide contains full vision and ambition document.



't Centrum – ambitions & market approach

4 Ambitions:

- 1. Future-proof sustainability – Circularity:** transition from traditional to circular, a prominent example of a circular building.
- 2. Future-proof sustainability – Flexibility:** able respond to changing spatial and functional needs.
- 3. Responsible sustainability - Health & well-being:** building = healthy and comfortable environment.
- 4. Image**

Question 2

How do you factor price into your procurement?
Why do you do this like that?



't Centrum - Price

- Made it clear from the start what our budget was: this is all we can and will give you.
- Divided into CAPEX and OPEX (20years).
- It is not a weighted criteria.
- Who can give us the best building for our budget?



't Centrum - Price

Radical? Yes! But possible within the legal framework!

Instead of differentiating on price, the market will be stimulated to a more qualitative and constructive approach.

From transaction to relation.



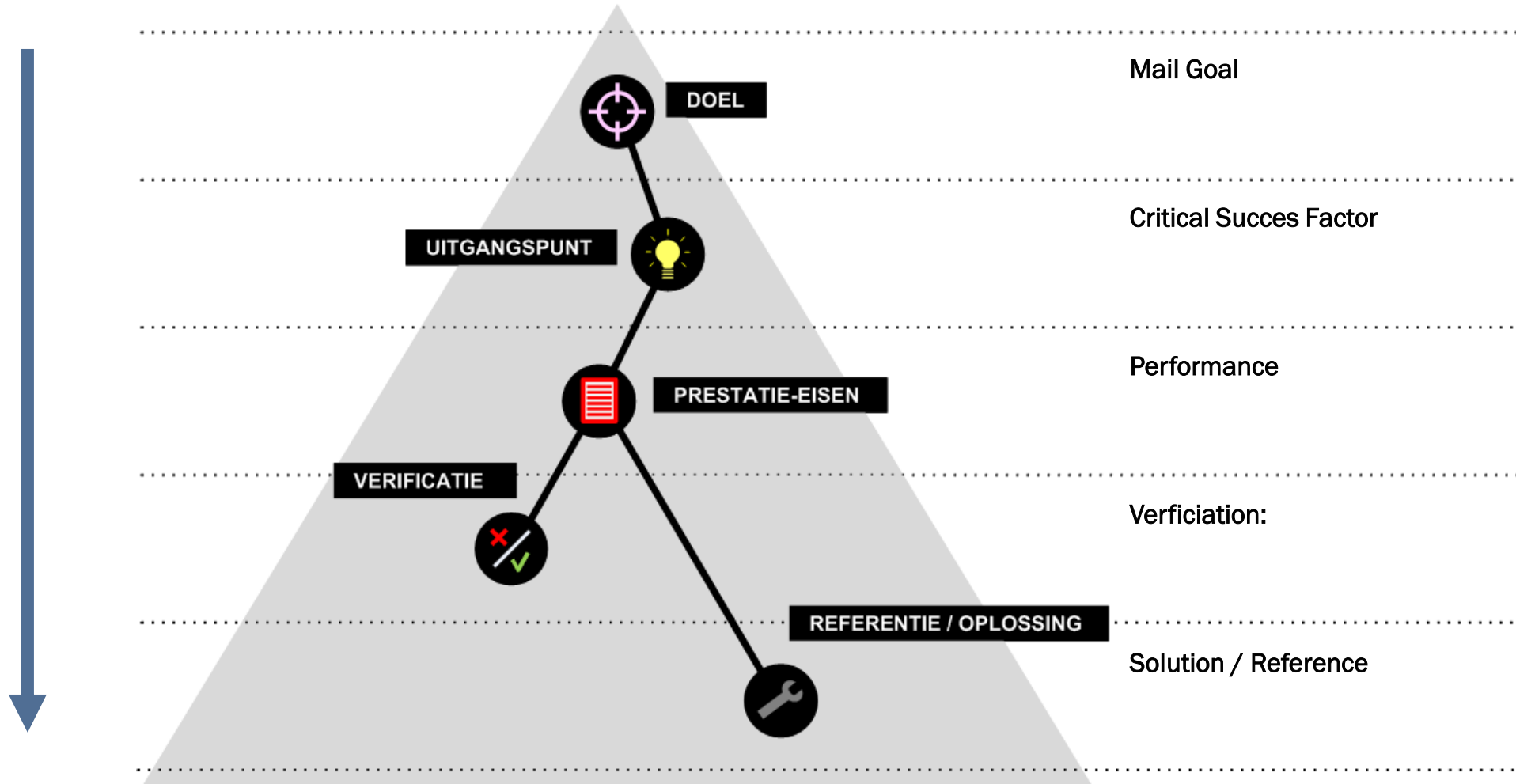
Question 3

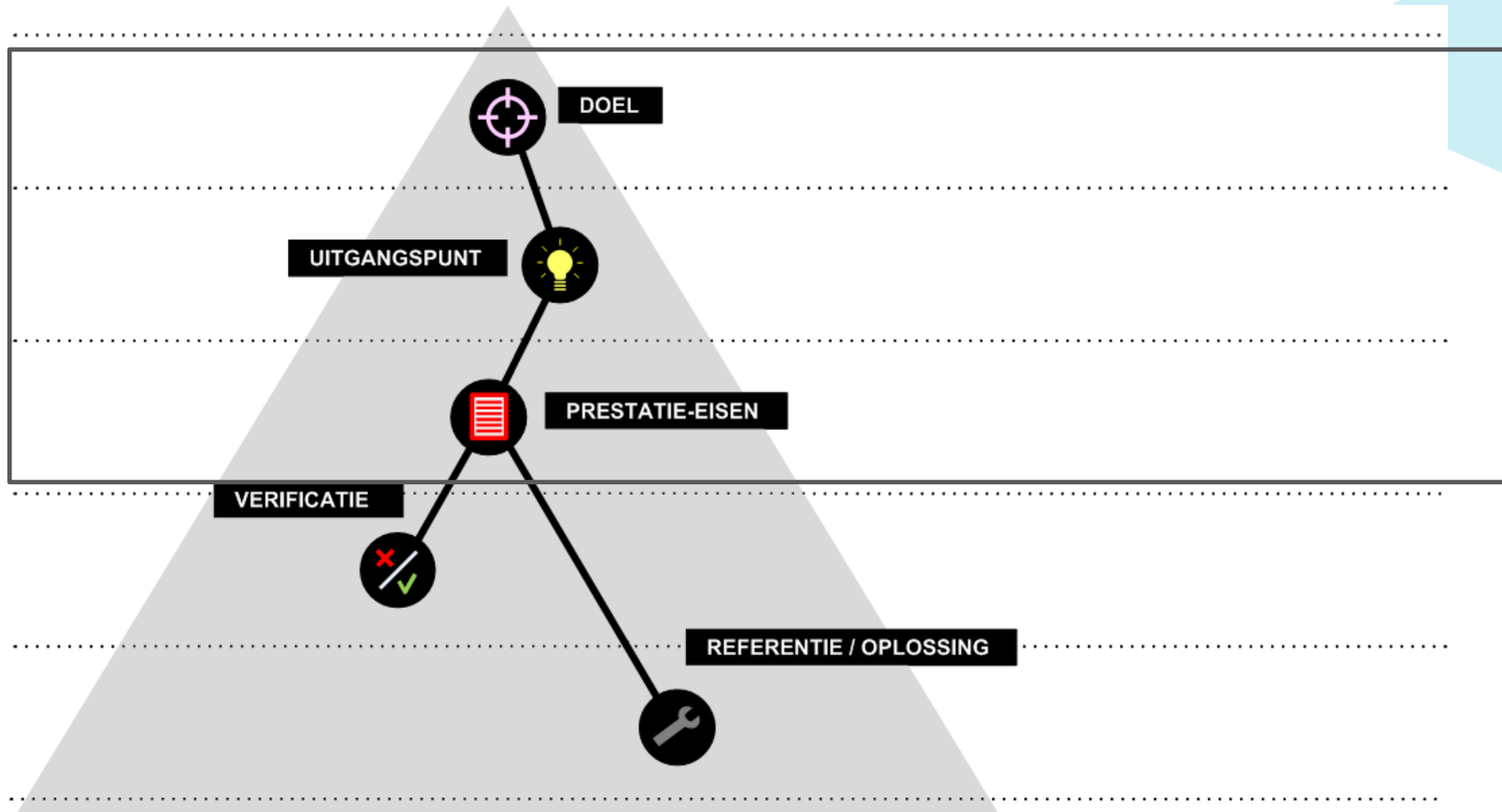
How would you evaluate or measure the received offers?

How do you measure circularity?



Nordic Five Level Structure.





Staying high in the Pyramid

Characteristics

- *Builder decides how to reach the formed ambitions / goals.*
- *Even possibility to have the Builder set the height of the ambition / goals.*

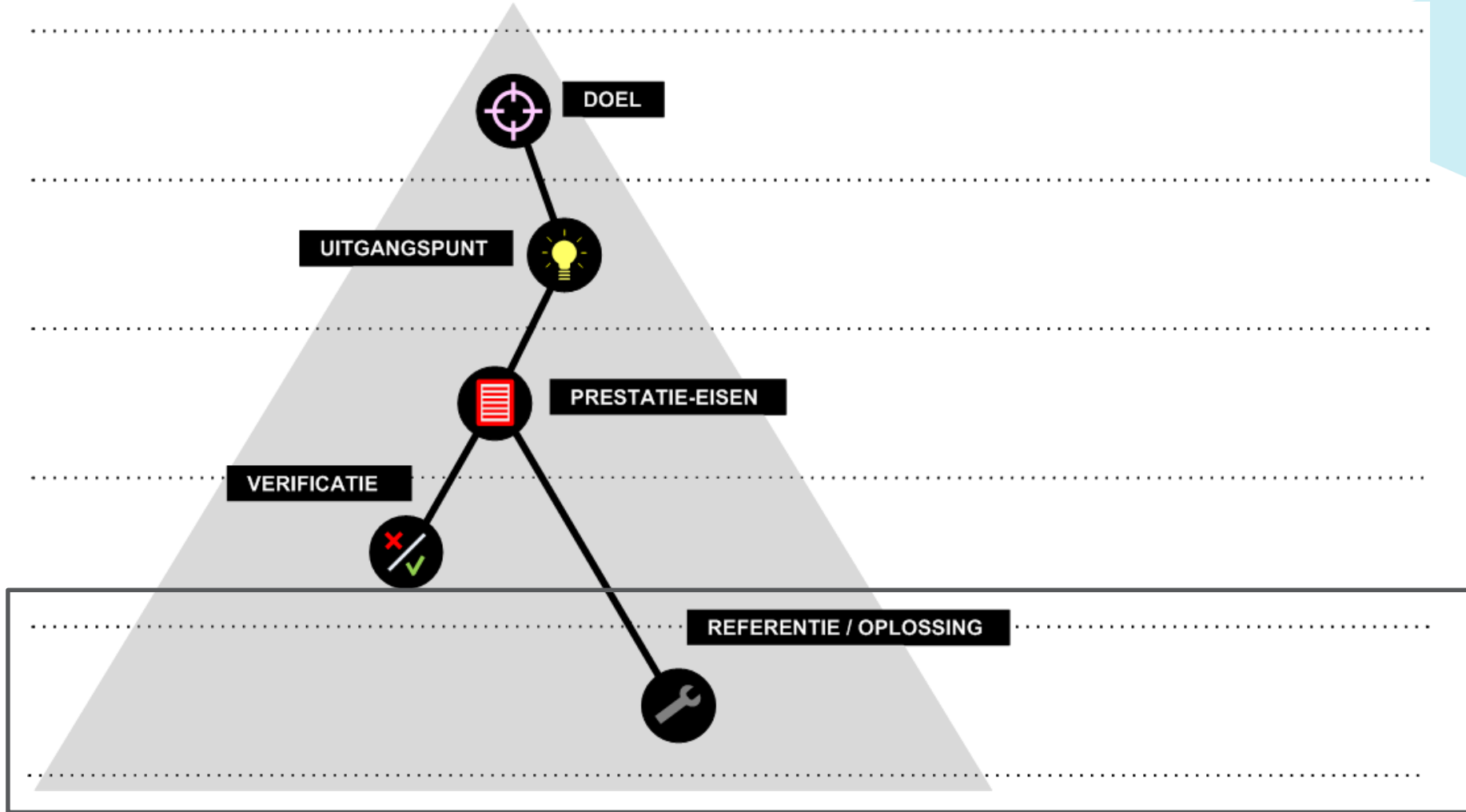
Advantage

- *The requestor stays focussed on it's real goal and ambition.*
- *The 'How to do it' is vested by the expert.*
- *Responsibility of reaching the goal/ambition is for the builder.*

Disadvantages

- *Less control and influence on how goals are reached.*
- *The challenge is within the objectivity of rating.*
- *On innovative aspects more control and guidance is needed.*





Detailing until blueprints

Characteristics

- *Fully description of what to make, how to make it, including all necessary drawings.*
- *Builders makes what is on the drawing*

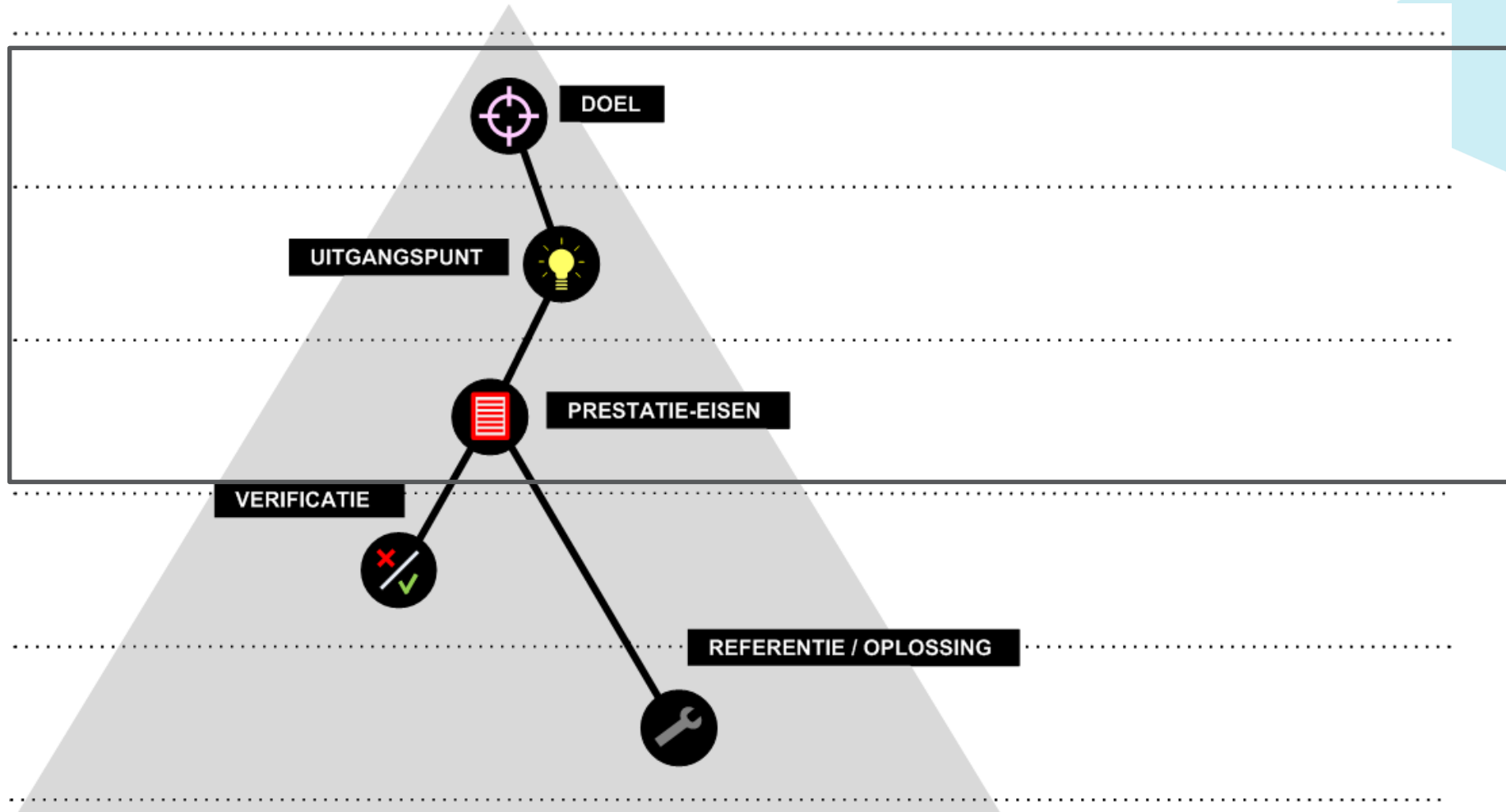
Benefits

- *Full influence on the outcome of the project*
- *Low costs in tendering and clear competitive pricing*

Disadvantages

- *Full responsibility for the client*
- *Circularity is determined by the design without a full optimization of the realization.*
- *Knowledge and expertise of the builders are not fully utilized.*
- *More difficult of Total Cost of Ownership*

What we did at Kamp C



't Centrum – measure offers

Three criteria:

1. (Sketch)Design & integration in the Kamp C site (40%)

2. Circularity (40%)

3. Actionplan – process (20%)

Circularity: Performance statements

(raw) materials.

Consumption & emissions.

Image & process.

Health & Use.

Finance.

Flexibility.

Mobility.



Circularity : Raw materials

Topic	Nr	Make a performance statement that includes ...
1 (raw) materials	1.1	Detachability / Dry connections / reversible
	1.2	Origin / Non-virgin application / Minimal "virgin materials"
	1.3	Rainwater reuse
	1.4	Upgrade and reuse in-site waste streams
	1.5	Consumable products must be biodegradable
	1.6	Extension of lifetime of products and building components
	1.7	Origin of materials and use of local materials
	1.8	Reuse of materials and components
	1.9	Recycled materials: upcycling

Experience from Rotor

Prescribing reuse in construction.

