

Sustainable railway stations

1 + 1 = 4

Harrie AMBERGEN

ProRail Assetmanagement, Stations

Manager development

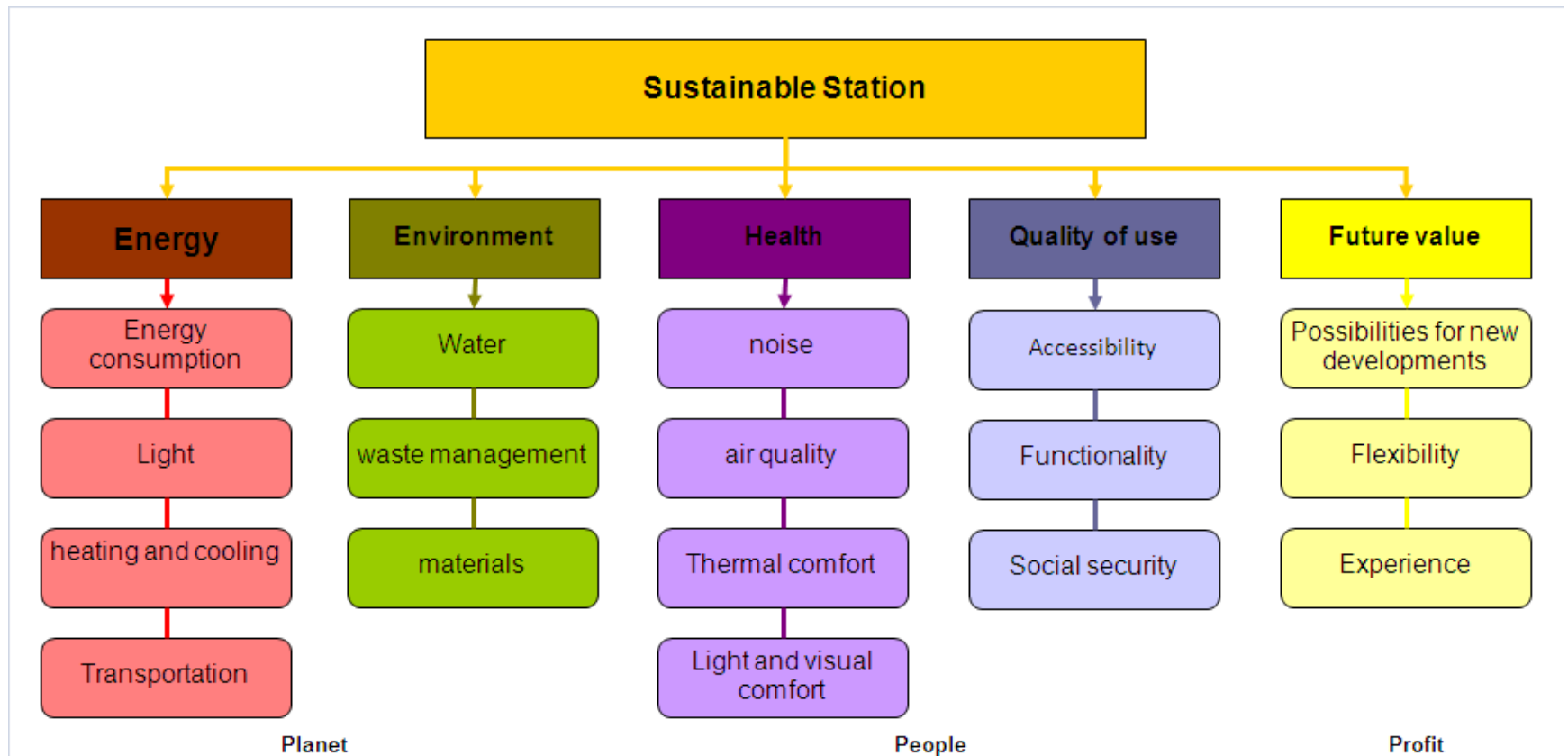
Vision Sustainable development

1. People: health, social security, accessibility
2. Planet: energy, waste, materials, ecology
3. Profit: property value, image, live cycle cost
4. Project: management, synergy, experience, relation with stakeholders

People, Planet, Profit, Project



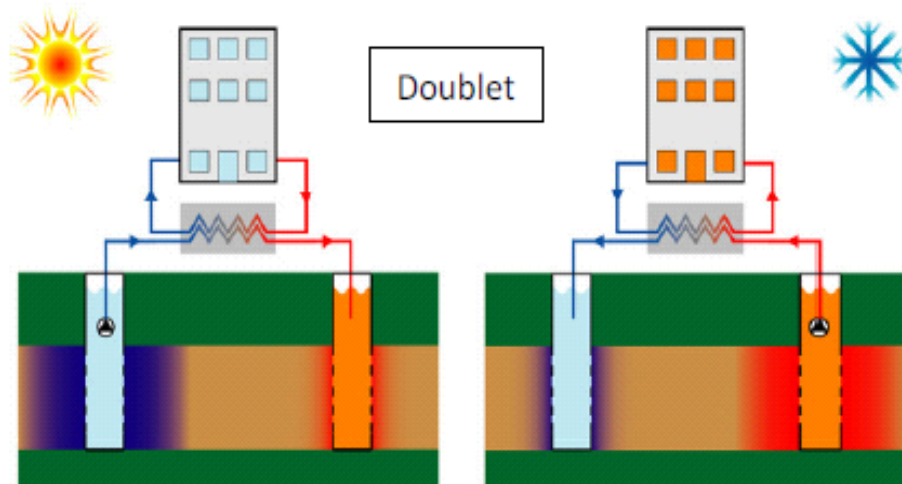
Assessment tool Sustainable Station



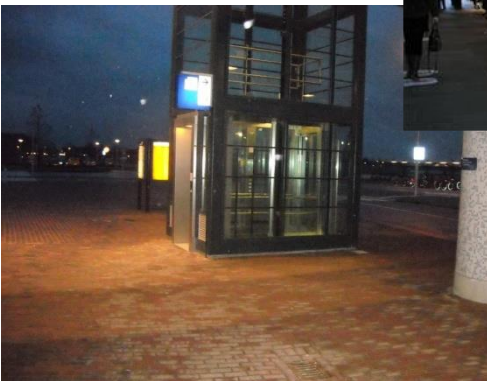
Examples energy



- Solar cells on Utrecht CS, Rotterdam CS and Amersfoort CS.
- LED light in Hengelo, Voorschoten and Naarden Bussum.
- Aquifer Thermal Energy Storage in Arnhem, Utrecht CS, Breda for cooling in summer and heating in winter.



Examples environment, flexibility, social safety



- Waste recycling
- Bee hotel
- Station Leiden: flexible, safe, assessable, easy to refurbish and compared to other stations low use of energy.
- Light: energy, social safety, feeling of comfort. To much can lead to discomfort or less safety feeling.

NEXT STATION 1+1=4

- One instrument for assessment stations on sustainability ?
➔ **Assessment tool Sustainable Station**
- A sustainable station is a profitable station:
 1. it's safe and pleasant for visitors
 2. it's energy efficient
 3. it's easy to maintain
 4. it's flexible (easy to refurbish).

- INFORMATION
- Station Assessment Tool Sustainability is developed by ProRail, NS Poort and W/E.
- Tool is discussed within SusStation Project
- More info about the Tool: gerald.oldemonnikhof@prorail.nl
- More info SusStation: jo.french@transportregeneration.co.uk



nextstation

BRUSSELS 2011

March 17-18



ProRail

