Sustainable railway stations

$1 + 1 = 4$

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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
Assessment tool Sustainable Station

- **Energy**
  - Energy consumption
  - Light
  - Heating and cooling
  - Transportation

- **Environment**
  - Water
  - Waste management
  - Materials

- **Health**
  - Noise
  - Air quality
  - Thermal comfort
  - Light and visual comfort

- **Quality of use**
  - Accessibility
  - Functionality
  - Social security

- **Future value**
  - Possibilities for new developments
  - Flexibility
  - Experience

- **Planet**
- **People**
- **Profit**
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
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