The green track network compiles a handbook on planning, installation and maintenance of green tracks. It gathers interdisciplinary knowledge to support the development of sustainable, ecological tram track greening.

**Water Balance**
- Greening of 4 km single track creates a green space of 10,000 m².
- Germany’s total of green track, 2011: ca. 425 km (380 km grass track, 45 km sedum track) [3]
- Yearly increase of track greening (2009-2011): ca. 25 km single track [3]

**Fine Dust**
- Local contaminants of the air can deposit on the vegetation surface of tram track greening. The contaminants are partially bound and metabolised by the plants.
- PAH and heavy metals from cars and trams were found on sedum leaves [3]. Example measured in Dresden, Germany:
  - Soil and protection of the track surface from direct solar radiation [3]. Example measured in Dresden, Germany:
  - Rail temperature in ballasted tracks reached >50 ºC during summer
  - Rail temperature in grass and sedum track < 25-30 ºC [3]

**Sound**
- In tracks with greening up to the top of the rail sound can be mitigated by ca. 3 dB(A) compared to the noise wise optimal ballasted track. [3]
- The legally allowed sound bonus for green tracks of 2 dB supports the building of tram tracks in Germany.
- Green tracks also have a psychoacoustic effect and are perceived less noisy.

**Urban Design**
- The quality of urban open space is an important locational factor especially regarding the exploitation of settling enterprises. Studies indicate that 12 % of the customers are willing to pay higher prices in greened business areas [6].
- The optical upvaluation of urban open spaces influences social and mental health of humans.

**Urban Ecological Effects of Green Tram Tracks**

- **Water retention of the annual precipitation rate by track greening in Berlin:**
  - 50 % in sedum tracks in Berlin (measured) during summer up to 90 %,
  - 70 % in grass tracks (assumed), [3],
  - Applying an average precipitation rate of 790 l/m²/a in Germany [4] all German green tracks retain > 560 000 m³ water/a.

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**Urban Design**
- **Tram tracks influence the visual impression of the urban landscape.**
- Greening of tracks improves their appearance compared to ballasted or concrete surfaces and serves the image of the transport company and the city.
- This especially applies for urban spaces with little green, particularly in highly sealed inner city districts, where almost no alternative area exists.

**Green Tracks also have a psychoacoustic effect and are perceived less noisy.**