Sustainable Campus Mobility
Best Practices – Future Challenges

Panel B2: Sustainable Mobility on Campus

Panel Leader
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World-wide academic campuses

Campuses are similar to small and mid-size cities:
Need to organize life and activities for thousands of people:
- Instruction
- Research
- Community life

Sports
Events
Recreation
Restaurants
Shops

Can campus provide examples of sustainable mobility?

Several types of campuses

Roberto Battistini University of Bologna (I),
multicampus structure
within and near the city,
for 110’000 students and 6’000 staff.

Panellists – 1

Eddi Omcren Göteborg University (GU),
spread over the city,
50’000 students and 5,500 staff.

Panellists – 2

Bart Meehan Australian National University (ANU)
Green field on the fringe of Canberra,
150 buildings
15’000 students and 3’600 staff.

Panellists – 3
Mobility panel issues

- most difficult problems
  Increase of students and staff => additional buildings
  multi-campus structures => increased commuting distance
  both parents often work => child care infrastructure

- most pressing needs
  Limited budget: green initiatives need to be cost effective
  urgency for floor space => "no frills buildings",
  sustained support from university administration is often limited

- elements of solutions – tools
  Panellists
  Audience

Sustainable mobility on the EPFL campus

Sustainable Campus Conference
Novatlantis
Zürich - April 26, 2007

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Swiss academic landscape

EPFL Campus

Access to EPFL campus

Campus configuration
2005 Figures

1. Electricity: 44 GWh
2. Mobility: 40 GWh \( (2000) \)
3. Heating: 27 GWh

**Surface travel**

EPFL vehicles & business trips: 796,000 km of which EPFL fleet drove 450,000, ... burning 42,000 litres fuel

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**EPFL mobility actions**

**User behaviour**

RUMBA mobility observatory

**Access to campus**

- Improved public transport timetable
- Free half-fare rail card
- More bicycle racks + “bike-to-work” action

**Business mobility**

- Car sharing system (implemented: 2004)
  10 vehicles - 50% dedicated to EPFL.

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**EPFL Mobility**

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<th>Air</th>
<th>Train</th>
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<th>Car</th>
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Private mobility: 40 GWh / year ... 8'500 tons CO2

40 GWh / year ... 8'500 tons CO2 of which more than 5'500 tons from private motoring (heating: 1'300 tons / year)

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**1.1 EPFL Access modal split**

30% private mobility -> petrol-powered
54% public transport -> electricity-powered
16% self-powered

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**1.2 Staff vs. students**

Staff mainly drive cars: 55% Women - 40% Men

Students move more sustainably: 87% Women - 84% Men

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**Coordination with Public Transport Operation**

2006: new class schedule to decrease morning peak

2005: EPFL and Unil start at 8:15 am
2006: EPFL at 8:15 am / Unil at 8:30 am
EPFL modal split evolution

Results of EPFL mobility actions

User behaviour
- RUMBA mobility observatory: diagnosis tool

Access to campus
- New metro timetable: more convenient travel
- 160 new bicycle places => room for 600 bicycles
- 'bike-to-work': 450 participants at EPFL
- Half-fare rail card...above 50% access by public transport

Business mobility
- Car sharing system used by all faculties
- EPFL fleet reduced by 66%
- Users are satisfied
- Maintenance and fuel costs (03-05) = 23% => CHF 300'000.- saved
- Fuel savings (03-05) = 22% => 25'000 litres saved

Next steps: campus densification

Mobility Plan - under implementation
Further improve public transport, increase safety on site, negotiations about implicit subsidy to car parking (fee: 10 €/month)