The importance of sustainability in transport in mountainous regions

DI Dr. Romain Molitor – komobile w7 GmbH
Mountainous Areas in Europe

Emerald Network of Areas of Special Conservation Interest
Extent of the Biogeographical Regions map of NATURA 2000 to Pan-Europe
Revision as notified by the Standing Committee of the Bern Convention: November 2001

Source: EEA
Mountainous areas are sensitive areas

Impact of transport in mountainous areas:
- Concentration of traffic flows on a limited number of trunk links (road and rail)
- Effects of air pollution have a higher impact due to specific meteorological conditions and due to topography
- Noise spread is intensified due to specific topographic conditions
- Climate change may cause dramatic impacts changes (cryosphere)
Traffic flows on trunk roads crossing the Alps

Source: BMVIT
Noise spread in mountainous areas compared to lowland
Climate change

"Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millenia"

"Human influence on the climate system is clear. (...) It is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century"

Source: IPCC (2013)
Climate change: consequences in winter tourism

Source: OECD 2008; IPCC 2013
Tourism intensity in the area of the Alpine Convention

Source: Alpenzustandsbericht 2008
Arrivals tourists in the Alps (2007)

Source: Molitor et al. 2008
Modal choice in OD-destination trips in tourism in Europe

Source: Eurostat (2008)
Why sustainable mobility?

Global tourism emissions (CO$_2$), 2005

- Air transport: 522 MT CO$_2$ → 40%
- Car transport: 418 MT CO$_2$ → 32%
- Other transport: 39 MT CO$_2$ → 3%
- Accommodation: 274 MT CO$_2$ → 21%
- Activities: 32 MT CO$_2$ → 4%

→ 75% of CO$_2$ emissions of tourism caused by transport

→ approx. 5% of global CO$_2$ emissions caused by tourism

Source: UNWTO/Gössling 2008/2010
Sustainable mobility?
Dipl.-Ing. Helmut Koch
komobile Gmunden GmbH
Kirchengasse 3
A-4810 Gmunden
t: +43 (0)7612 70911
gmunden@komobile.at

www.komobile.at

Dipl.-Ing. Dr. techn. Romain Molitor
komobile w7 GmbH
Schottenfeldgasse 51/17
A-1070 Wien
t: +43.1.89 00 681
wien@komobile.at

komobile Luxembourg s.à.r.l.
43, rue de Strasbourg,
L-2561 Luxembourg
t: +352.22 70 74
luxembourg@komobile.lu