

# **Climate Protection – Perspectives for a good life**

## **Vorarlberg en route to autonomous energy supply**

**AlpWeek Poschiavo**  
**Sept. 5<sup>th</sup> 2012**

**Adolf Gross**  
**Head of energy, climate protection and efficient resource use**  
**State Government of Vorarlberg, Austria**



## Examples where we are (I)

- Share of biomass for heating purposes: about 25%
- We run more than hundred biomass district heating systems
- Area of solar thermal panels in Vorarlberg is 0,65 m<sup>2</sup> per inhabitant, 0,7 m<sup>2</sup> PV
- Hydropower covers about 80% of total electricity consumption
- Share of bicycle traffic is 17%
- Quality und density of public transport is similar to big cities
- We run one of the European largest implementation programme for electric mobility
- Approximately one fourth of all families claimed an energy consulting
- One third of all communities take part in the programme for energy efficient communities

## Examples where we are (II)

- In the communities passive house quality is common standard
- You only get a building subsidy if you use renewable energy
- More or less all of the new build buildings are in low energy standard at least
- We have the worldwide highest density of passive houses (almost 30% of all new build dwellings are in passive house standard)
- Years ago we broadly developed and introduced a comprehensive building certification system
- Last year we reached a renovation rate of 3%

## Why thinking foresighted

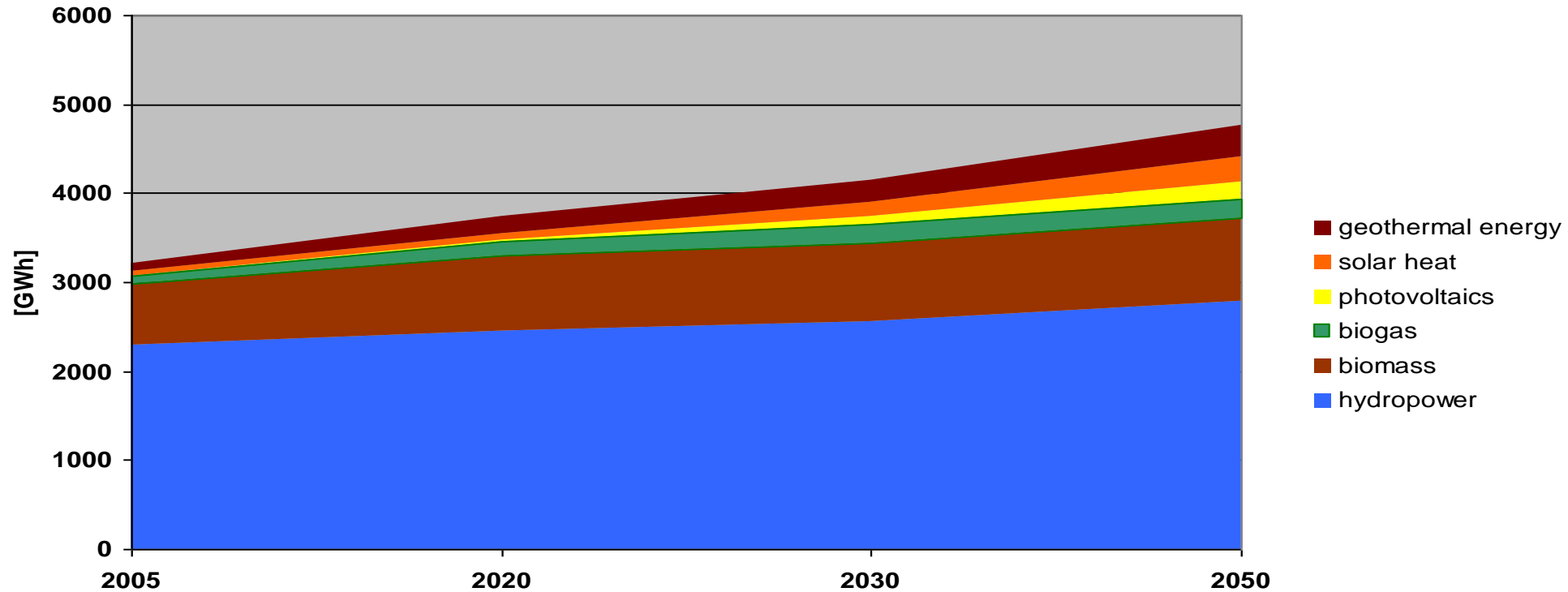
- climate protection – cutting down CO2 emissions until 2050 by 90%
- peak oil, resource shortages
- dependency and security of supply
- risk reduction
- development and peacekeeping
- ensuring flourishing of future generations

## The „Energy Future Vorarlberg“ process – key questions

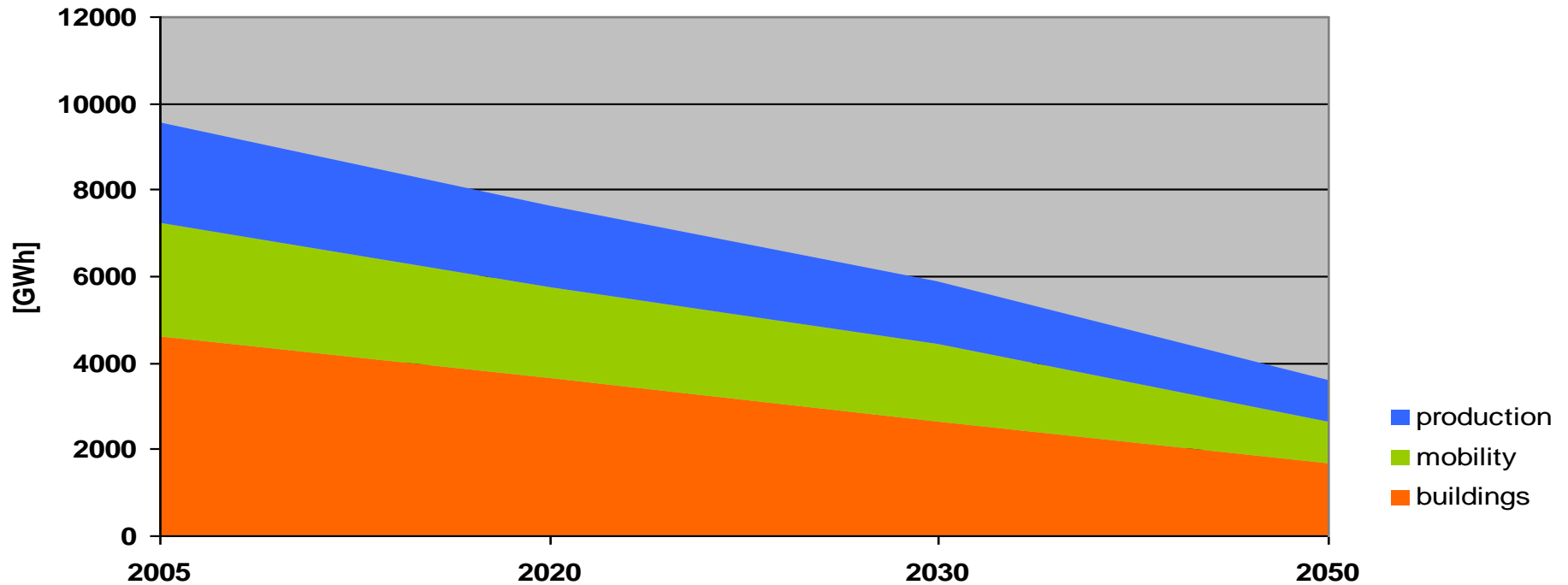
- Is a sustainable energy supply possible and in which time scales?
- Which level of improvement in efficiency is possible based on current knowledge?
- Which potentials of renewable energy sources are still deducible?
- What are the basic principles of action in all relevant areas?
- What are the most important recommended actions?
- How does a concrete implementation program until 2020 look like?
- How do we guarantee the widest possible participation and acceptance?



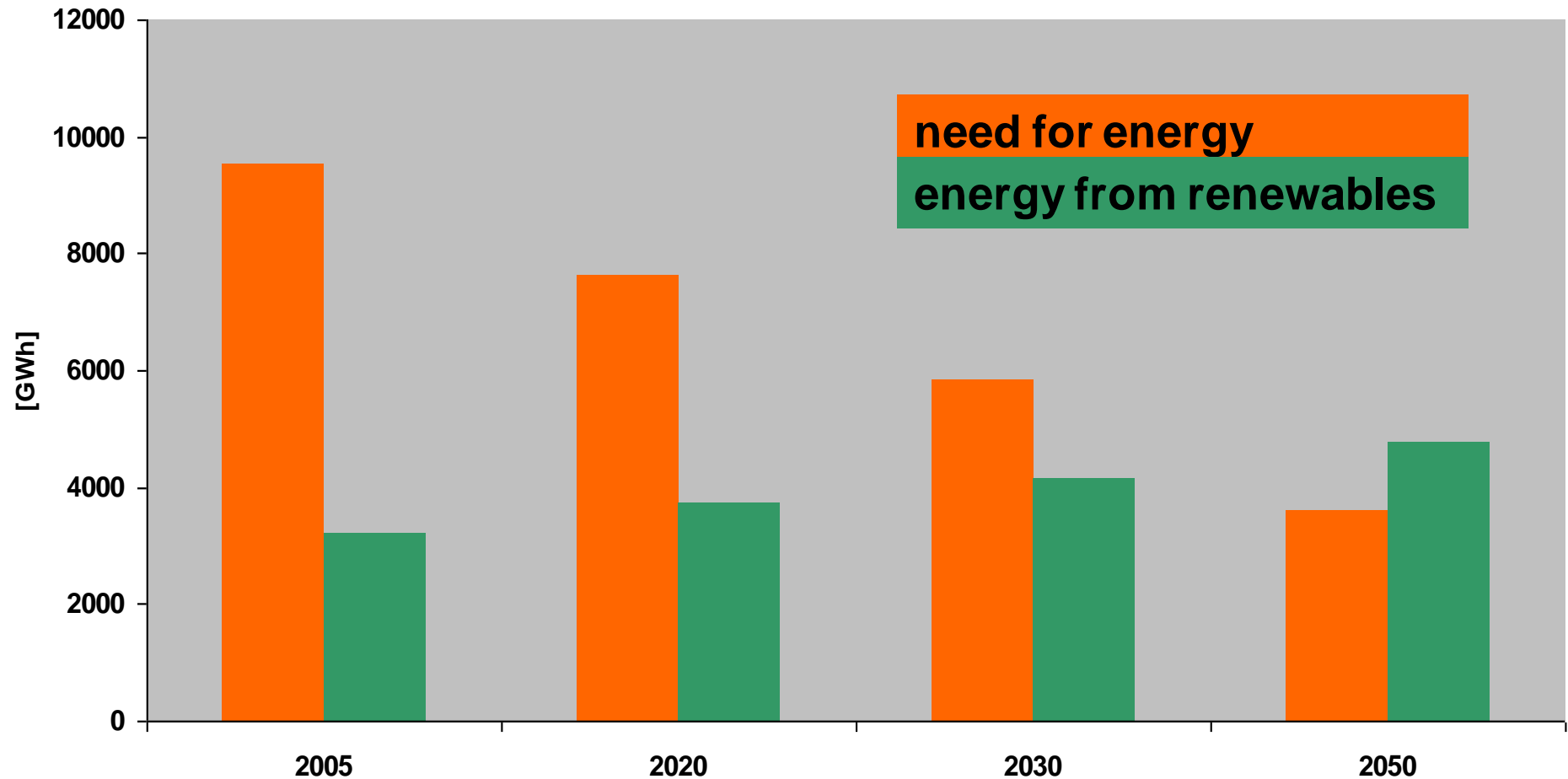
# Use of renewable energy sources



# Realization of efficiency potentials



# The goal – autonomy in energy





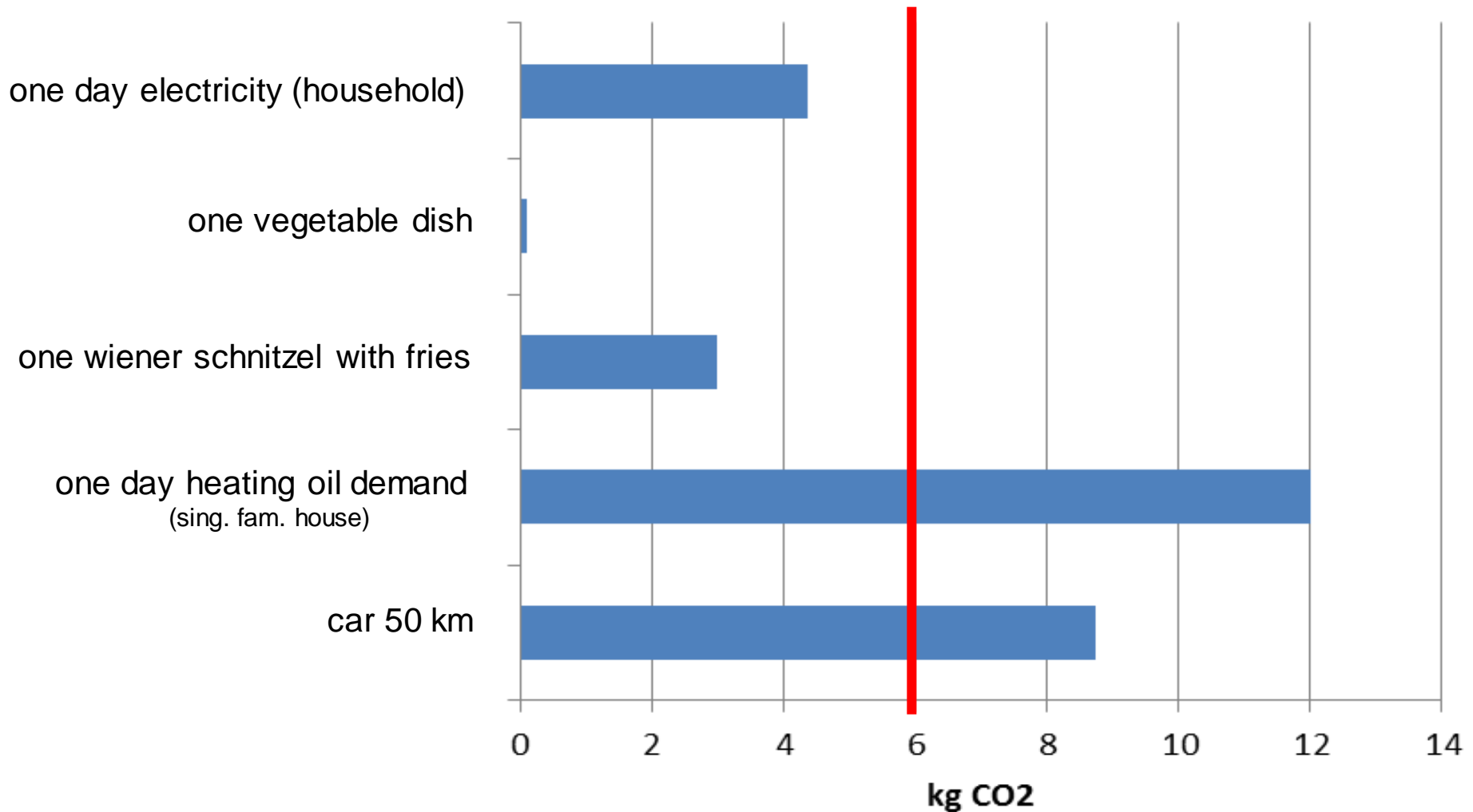
# Schritt für Schritt zur Energieautonomie in Vorarlberg

101 enkeltaugliche  
Maßnahmen

*step by step to energy autonomy  
101 grandchild suitable measures*



# CO<sub>2</sub> emissions per day and the sustainable one day limit









# Some important questions

## How do we live?

**What do I really need to fulfill my requirements of accommodation and to feel comfortable?**

*area and equipment, flat our own house, distance to work, energy consumption, ..*

## How are we mobile?

**Where I want to go, is it really important for me to be there?**

*means of transport, using or possessing, travelling or consuming, ...*

## What do we eat?

**What is really good for me and how do I want my food is produced?**

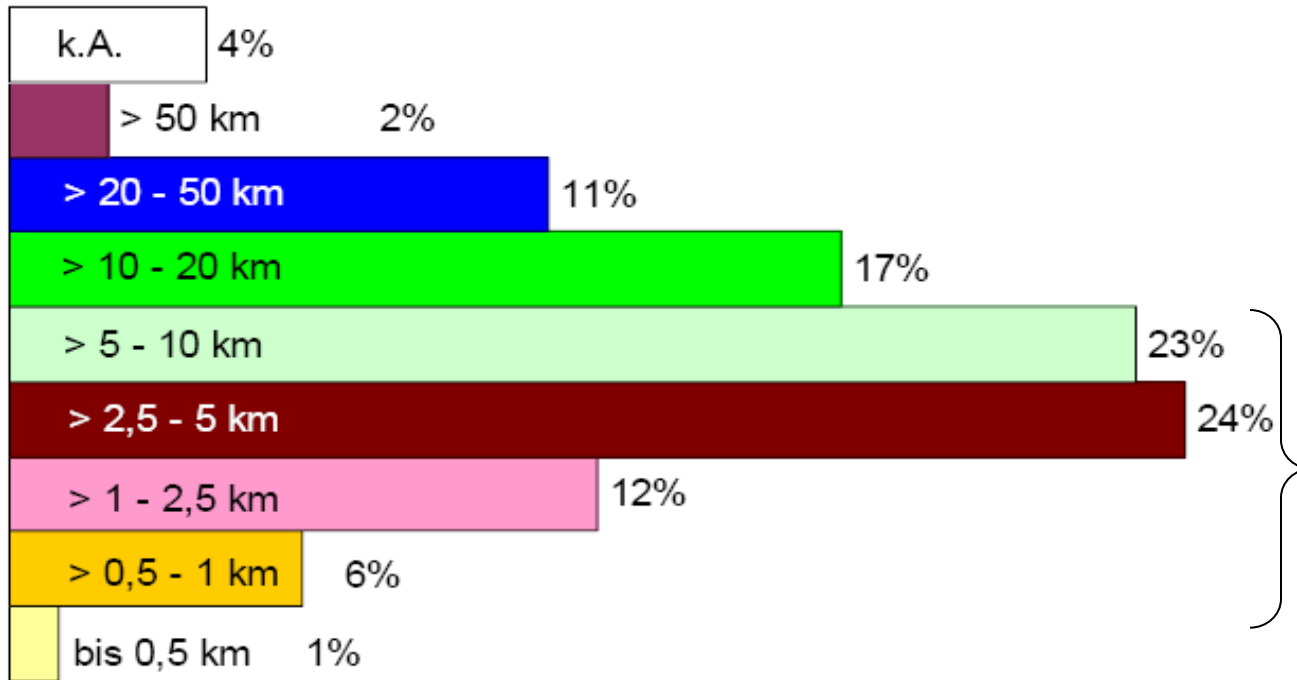
*vegetarian, organic, fair trade*

## What do we consume?

**Does it make me happier having that stuff as well?**

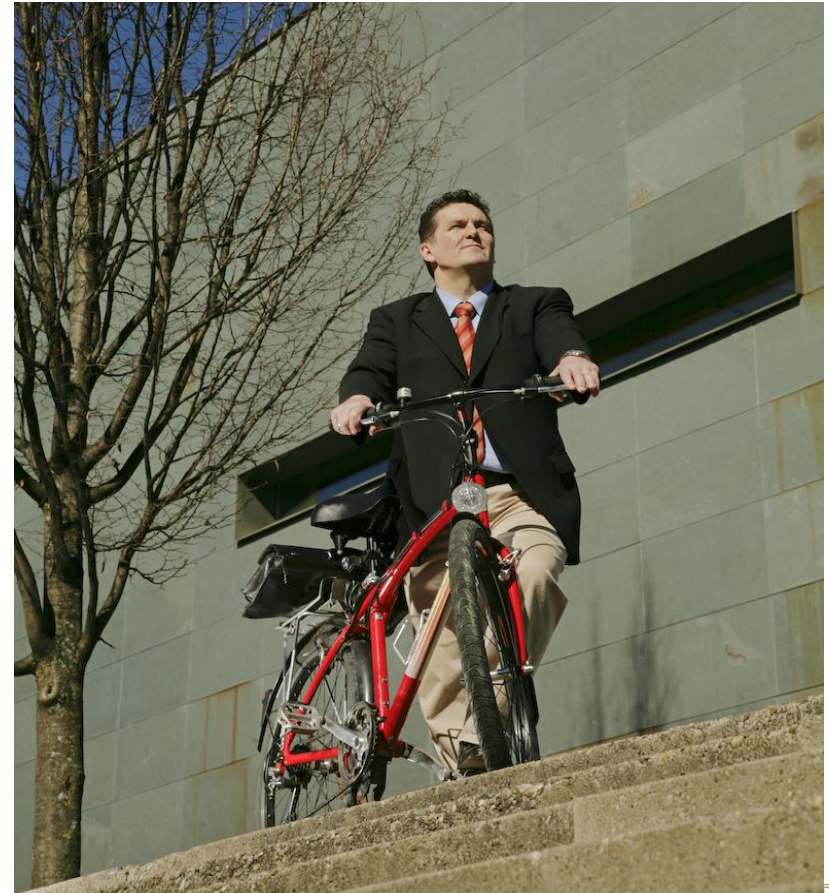
*how much, live span, reparability, common use instead of possessing*

## distances by car



Quelle: Herry Consult (2004)

## Change of technology?



## Change of technology – example e-cars

Of course, e-cars are better in a direct comparison (if power is renewable)

**But:**

- It is no solution if we think it is simply an other technology of individual transport without changing mobility basically.
- We can't produce and run 3 billion e-cars ecologically and social sustainable.
- It is crucial to discuss technologies in a significantly wider social context





## no business as usual anymore

Please note that climate protection isn't primarily a technological debate, but rather a cultural task.

Basic questions like how we deal with other peoples, how do we live and last but not least how do we treat our blue marble, arise.

Do we foster the options of future generations? Do we hamper or even destroy them?

Finally it is about the question what life we want to live.



# The big transformation process

Transformation applies to a good part of living and economic areas. This task affects the society as a whole and is not delegable. It can only be overcome by involving those who are concerned, just everybody.

At the end of this process are the citizens who not bring to the surrender, but cause and support – through cultural participation – a society which they consider to be good.

(Harald Welzer “Das Ende der Welt wie wir sie kannten”)



**Ich würde  
ja sofort  
etwas fürs Klima tun.**



**Aber ich bin halt nur  
ein Plakat.**

Reference: WWF

I would immediately do something for the climate.  
But I am just a poster.

**climate protection is a spring for  
wellbeing**

**imaging ....**





**... you live in a flat with high comfort, bright and warm  
and, of course, fresh air all along**





... when you leave the house it is silent, you breath salubrios air





... the building surfaces produce energy mute and emission-free





**... there are no more coal and nuclear plants -  
offshore wind turbines rotate peaceful**



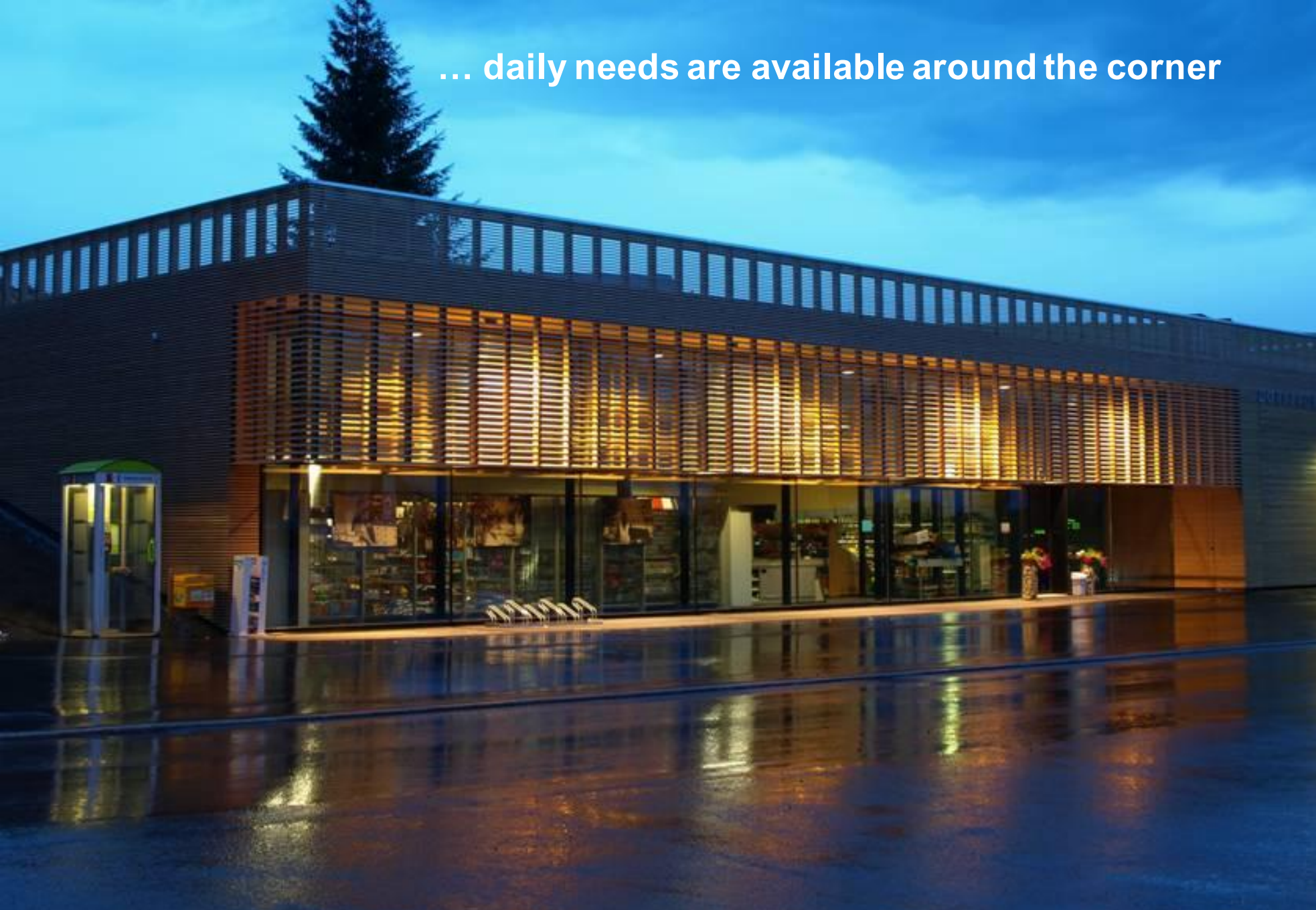


**... sun power delivers energy reliable and for free**





... daily needs are available around the corner





... streets are venues





... bikes are the most important vehicles for short distances



Ausgenommen  
Radfahrer und  
Fahrten für  
landwirtschaftliche  
Zwecke





... public transportation picks you up nearby



... cities are connected with comfortable high speed trains



... the very few cars we still need run electrically







... food is farmed organically



... industry produces emission-free and is part of circular economy



step by step to energy autonomy  
step by step to a better life  
it is up to you (and me of course)



[www.energiezukunft-vorarlberg.at](http://www.energiezukunft-vorarlberg.at)

## Contact

adolf.gross@vorarlberg.at