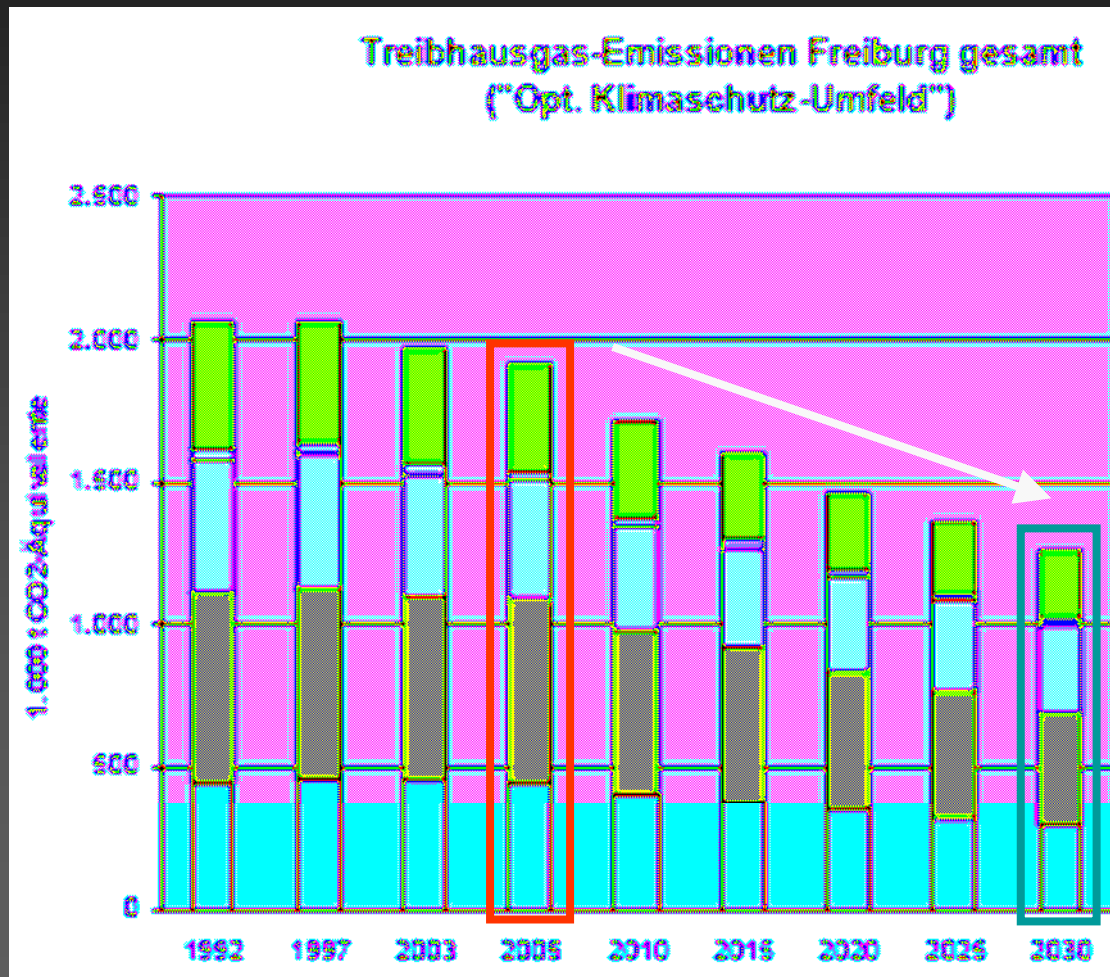


► Main „energy consumers“ – „CO₂ producers“



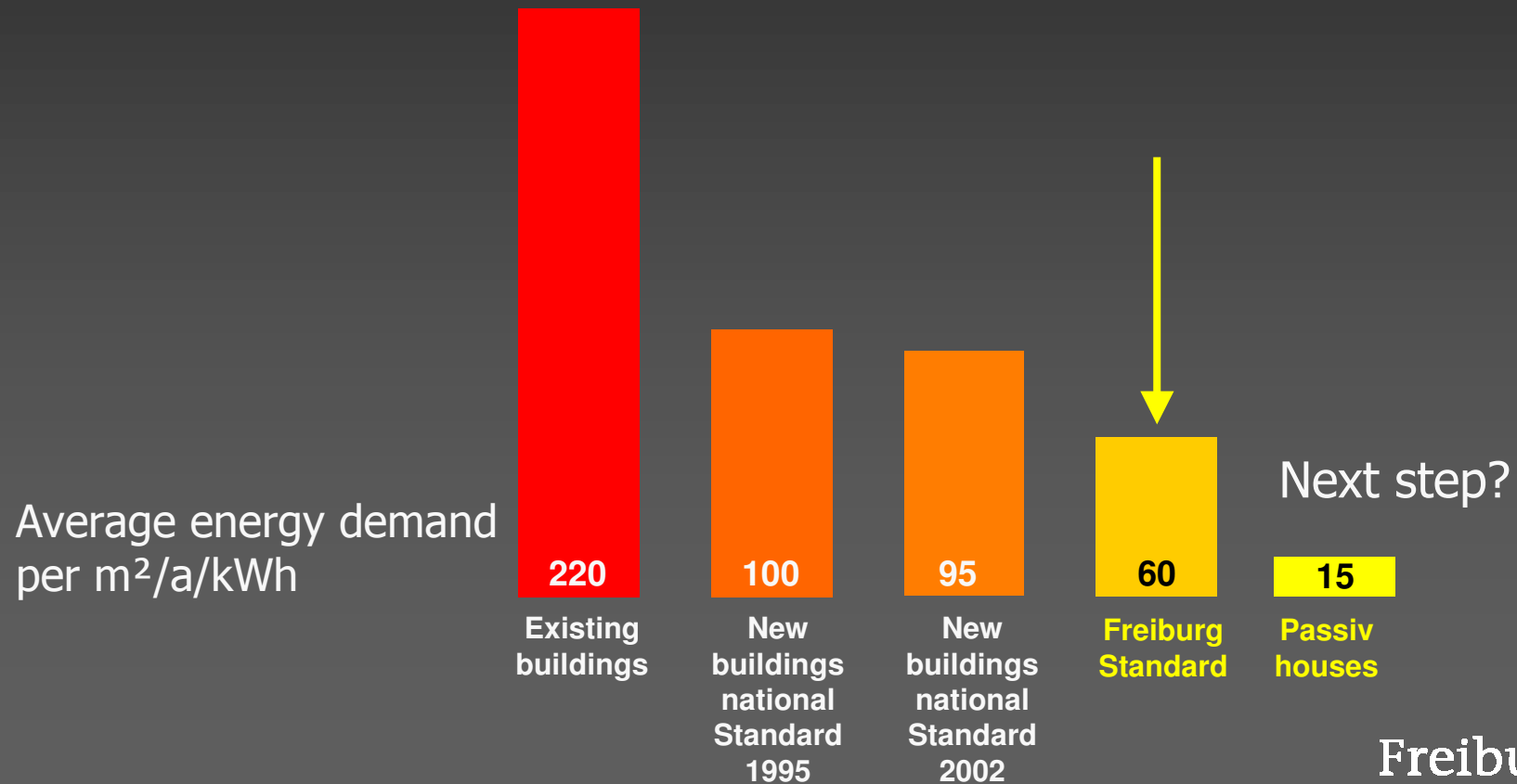
traffic
city administration
industry
craftsmen, trade...
households

▶ Examples examples

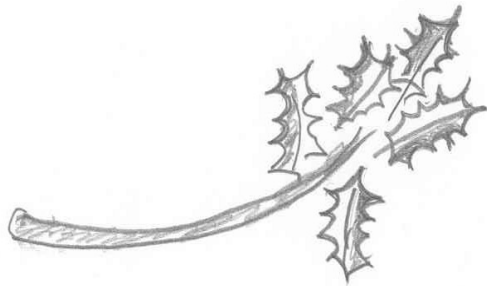
- ▶ Urban planning (households)
- ▶ Transportation policy (traffic)
- ▶ City as role model (city administration)
- ▶ Cooperation, Networking, Communication (industry, trade, craftsmen)

▶ Urban planning – new buildings

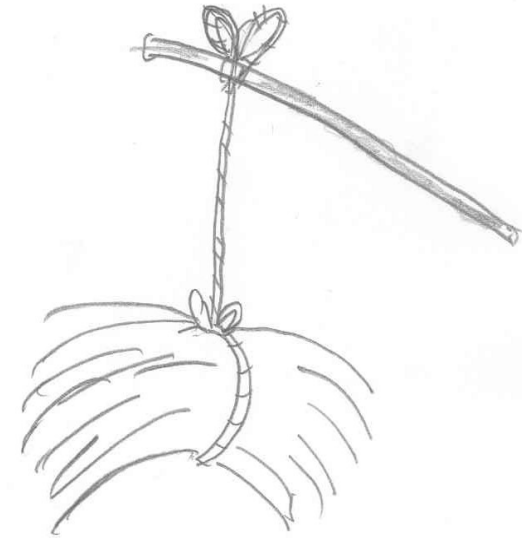
▶ Importance in the field of energy demand



► Urban planning – looking at the instruments...



"push"



"pull"

▶ Urban planning – new city quarters



- ▶ In the past: Non consistent consideration of energy aspects in planning process
- ▶ Conclusion: Need of guidelines within administration
- ▶ Aim: Early consideration of energy aspects in planning process

▶ Urban planning

- ▶ Result: Energy Guidelines for planning of new city quarters - Decision by city council!
- ▶ Solar aspects, energy conception, communication



▶ Transportation policy

1. Traffic reduction
(„City of short distances“)
2. Shift from individual motor car traffic use to public transport and bicycles
3. Lasting motor car traffic: Arrange and plan as environmental friendly as possible



► 70ies...



► today...

Bicycle lane development





straßenbegleitende Radwege 114 km



selbständig geführte Radwege 46 km

Bicycle paths in total: 410 km



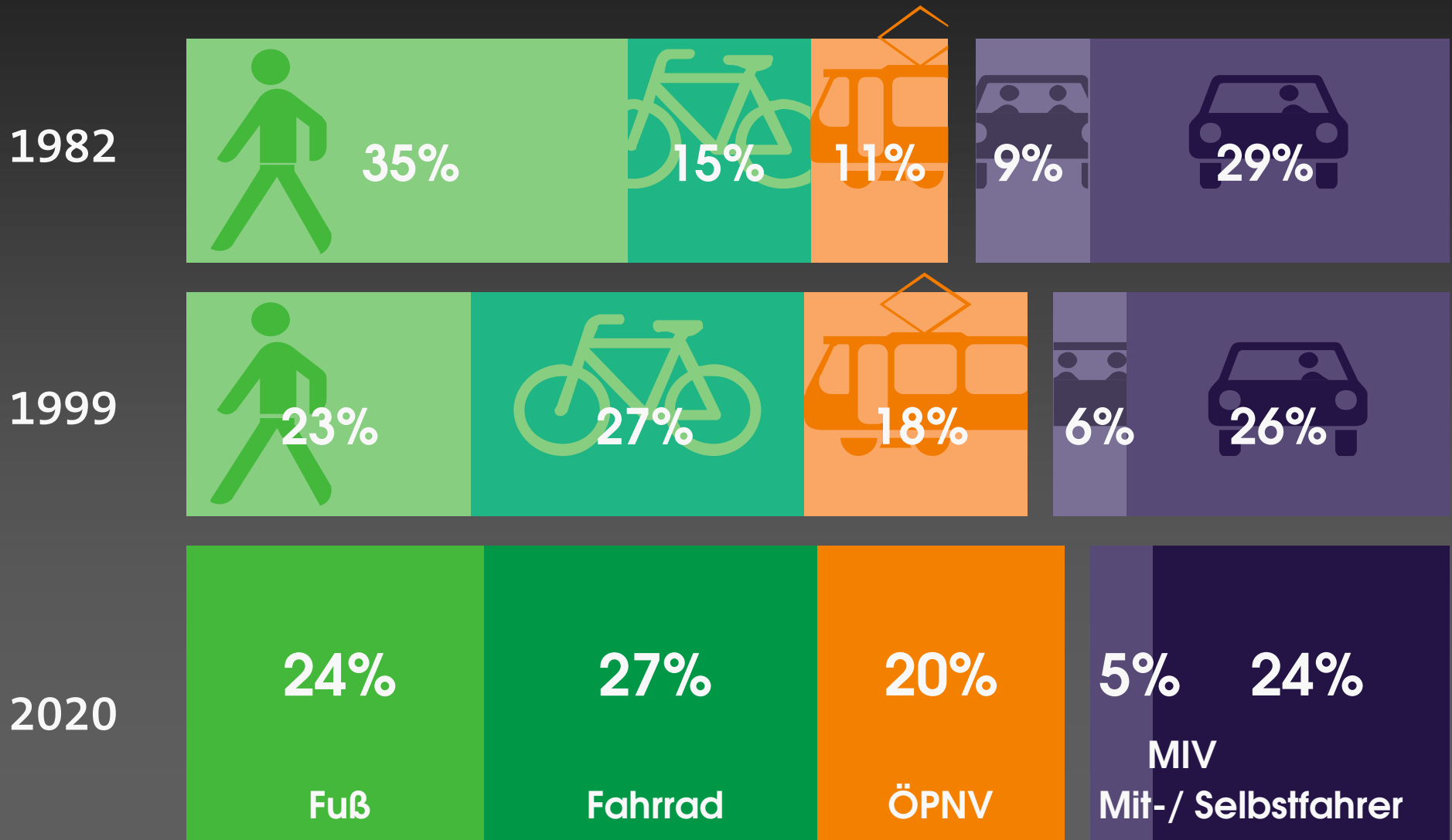
radfahrfreundliche Straßen 130 km



Wald- und Wirtschaftswege 120 km

▶ Transportation policy

▶ Means of travel



Cleverer Zug gegen hohe Benzinpreise.



**Immer in Ihrer Nähe.
Mitfahren und Geld sparen.
Je täglicher, desto besser.**

Freiburger Verkehrs AG
Ganz die Freiburger Linie



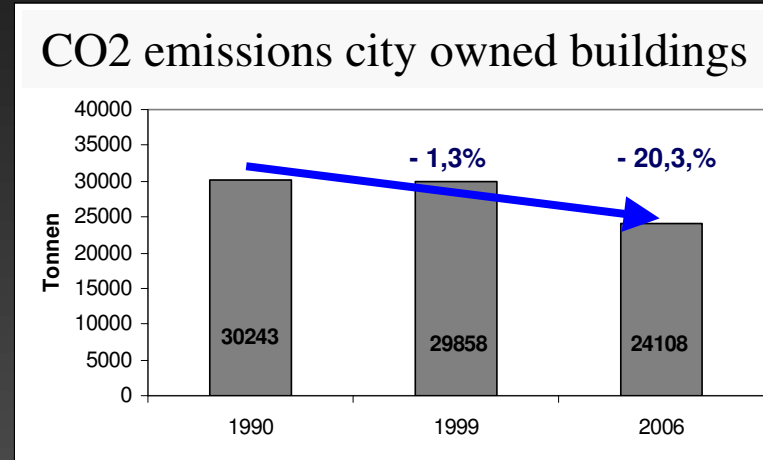
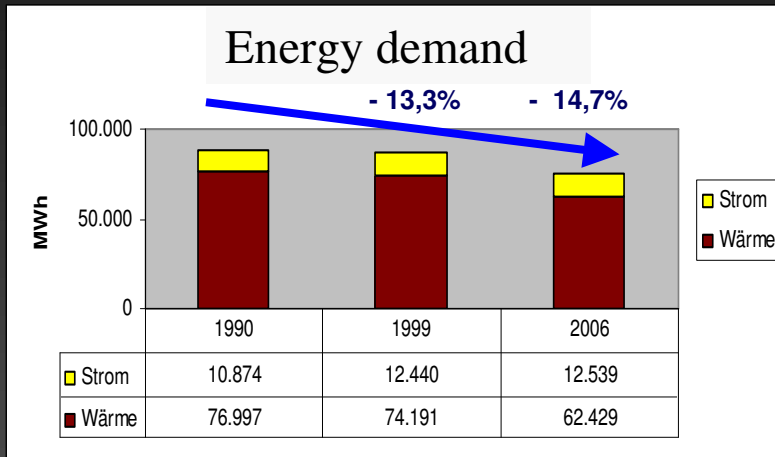
▶ City as a „role model“

- ▶ Roofs for photovoltaic systems
- ▶ Green electricity for administration and schools
- ▶ Renovation of municipal buildings
- ▶ Energy saving in offices



Town hall, Freiburg

► City as a „role model“ – energy management



CO₂- reduction 1990-2006: 20% (increasment of floor space meanwhile: 17%)



Renovation: Low Energy Building

▶ Cooperation, Networking

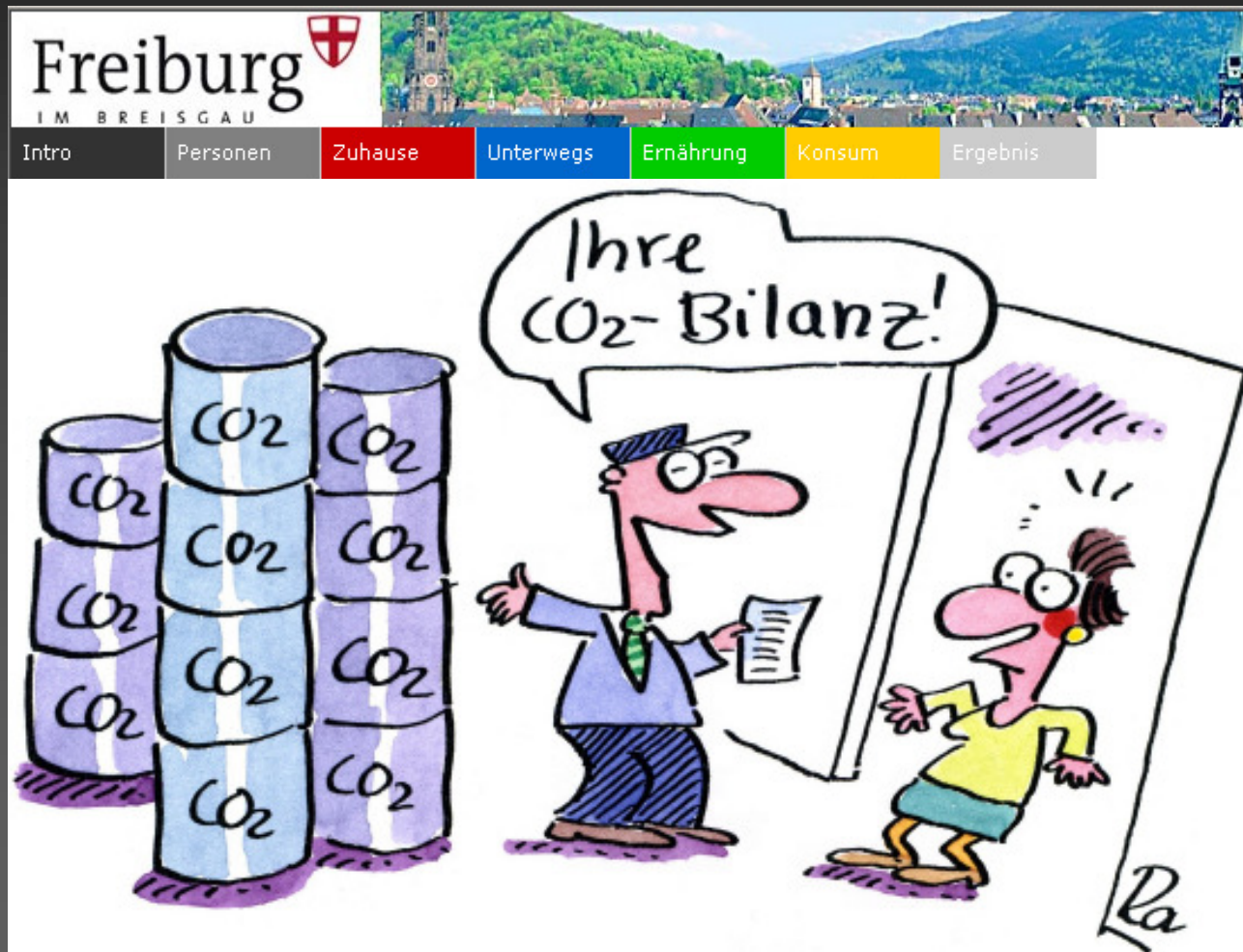
- ▶ Get stakeholders involved: Energy supplier, industry, skilled trades, banks, training institutions, building companies, NGO, citizens!
- ▶ Be positive and convincing; Take the concerns of stakeholders seriously; Positive Examples – Pilot projects



Solar Info Centre Freiburg (SIC): Institutions, consulting engineers

► Communication

- Citizens individual web-based CO₂ footprint calculator



- ▶ Communication
- ▶ Get schools on board



- ▶ National conditions
- ▶ National climate protection goals (related to European and International objectives)
- ▶ National acts: e.g. Renewable Resources Act (EEG)
- ▶ National subsidy programmes for energy efficiency (loans for ecological construction of buildings, co-generation)



Bundesministerium für Verkehr, Bau und Stadtentwicklung

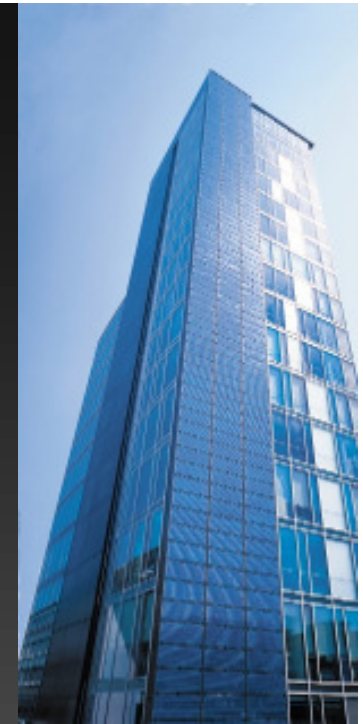
CO₂-Gebäudesanierung:
Heute die Energie für morgen sichern.

Schön warm, schön sparsam,
schön umweltfreundlich.
Jetzt staatliche Förderung für Heizungsmodernisierung und Dämmung beantragen.

Mit Wärmedämmung und dem Austausch veralteter Heizungsanlagen und Fenster können Sie Ihre Heizkosten spürbar senken. Darüber hinaus leisten Sie durch CO₂-Gebäudesanierung einen entscheidenden Beitrag für den Klimaschutz. Nutzen Sie deshalb die staatliche Förderung und stellen Sie jetzt Ihre Heizung auf moderne Anlagentechnik um. Nähere Informationen zu unseren Förderprogrammen unter www.energie-fuer-morgen.de

► Conclusion

1. Local strategies: Define assets and resources
2. City council: Decision on targets
3. Evaluation: Regular monitoring
4. Concentrate: Main fields of action - Get started!
5. City planning: Early consideration of energy aspects
6. Be positive: "City" as role model
7. Cooperation - Communication: Get local stakeholders and citizens involved
8. City networking: Learn from others



What could we do
if everyone said
what will we do
and nobody stepped forward
to see
what might be done
if only we do.

Kurt Marti



contact: klaus.hoppe@stadt.freiburg.de

**Be pioneers, Take the lead,
Citizens are ready to follow!**

