

SF 27: Creation of markets, development of market mechanisms, market rules

Fr	B	C	NY	S	T	Total
4	6	3	6	7	9	35

Beispiel:

Cap and Trade System in **Tokyo**: a binding emission rights system for industry and offices has been in place since 2010 ({Environment of Tokyo # 25}).

Other examples are the Green Building Scheme or a low-energy housing standard, which influence the real estate prices of „green“ buildings ({Environment of Tokyo 2012 # 26}).

1. Differentiated description of the key field

In addition to incentives and regulations, the creation of markets is the third option available to cities to evoke sustainable behaviour. Two variants must be distinguished here:

a) Existing markets are geared towards sustainability via instruments such as benchmarking or certifications. This is the way the Green Building Scheme in Singapore and the LEED standard in the US work, for example. They reward investments in sustainable buildings on the real estate market.

b) The creation of new markets for the internalisation of external costs. The idea behind this is to exploit the efficient allocation mechanisms of the market in order to achieve emissions reductions where they are most cost-effective. The best example of this is emissions trading: with respect to self-imposed CO₂ targets, a city defines an annual cap on emissions and distributes or sells to local polluters emission allowances that correspond to a defined key. If their emissions are greater than those of the certificates obtained, additional certificates have to be purchased. If they are lower, the surplus certificates can be sold. Cf. ({Holmgren 2007 #4})

To date, few cities have successfully implemented emission trading schemes. They include some pioneering cities in China and, above all, Tokyo. The prerequisites for emission trading systems are more difficult to produce at local level, particularly since comprehensive monitoring is essential and the risk of „carbon leakage“ rapidly arises.

However, there is much to be said for reducing „downstream emissions“ at the local level through a market-based system. EU- or nation-state-based emissions trading schemes aim at reducing CO₂ emissions in energy production. Local systems can target consumption and thus address the much talked about topic of „energy efficiency“.

2. Reference to sustainability:

A city can create the prerequisite for the efficient implementation of its goals at the lowest possible cost by setting caps and market rules. Cutting emissions becomes economically attractive. In contrast, however, one must weigh up the extent to which any disadvantages for different social groups arise on account of a market-based system.

3. Relevance to industrial sectors?

Mobility:	Low
Energy:	High
Production & logistics:	Medium
Security:	Low
ICT:	Low
Water infrastructure:	Low
Buildings:	High
Governance:	High

Brief description of the high level of importance:

If a local emissions trading system for greenhouse gases is set up, it affects above all the energy sector (shift towards renewables and energy saving) and the building sector (investment in efficient building). ICT can play an important role by providing the structures for regulating the market and trading.

4. Impact (positive & negative)

- Market-based instruments such as emissions certificates form a more efficient approach to reducing emissions than, for example, taxes or technology-specific restrictions or regulations.
- As the most cost-effective way to reduce emissions is sought, business and ecology are hereby combined.
- This contrasts with fairly high administrative costs.

5. Implementation measures:

The following steps are recommended to develop and implement a talent-attraction strategy:

- 1) Determine the strengths, weaknesses, opportunities, risks associated with the city by means of SWOT analysis
- 2) Define economic opportunities offered by the city for skilled workers (where are there attractive pull factors for workers?)
- 3) Catalogue the city's positive pull factors (geography, existing services, culture, etc.)
- 4) Identify existing barriers to the pull factors as well as the lack of services and offerings
- 5) Derive a concept for offerings and services
- 6) Implement measures under the concept

7) Monitoring and performance evaluation of the individual measures

6. *Actors: Who can shape things?*

Politicians and the city administration take the position of the regulator. They should be supported in the establishment of markets by external experts. Local industry and the population affected should be consulted when market rules are being developed.

7. *Prerequisites:*

- Reliable data on „baseline emissions“
- A sufficiently large the catchment area. Often, the city itself is not a sufficiently large unit. The concept must be implemented within a region.
- A clear target group (companies/individuals/building owner)

8. *Obstacles/barriers:*

- Carbon leakage (migration of CO₂-intensive production)
- Grandfathering (too many certificates issued for free)
- Administrative expenses

9. *Indicators:*

10. *Special features/remarks:*

Further literature regarding the city as a brand:
{Wegener 2013 #33}, {Stadt Wien #34}, {Rodlbauer 2008 #35}.

- Problem of emissions trading: according to the political scientist Elmar Altvater, emissions trading is a „legal construction“, according to which the pollution of the atmosphere is turned into a legal title that can be traded on the market; eliminating pollution entails valorisation. This legal form of valorisation contradicts the classical political theory, according to which work enables the acquisition of property rights.

Further reading on emissions trading:
{Sachverständigenrat für Umweltfragen 2006 #27}, {Nishida 2012 #28}

It would be advisable to link two market mechanisms with each other, so that a market can really be created. The best example of this is Tokyo with its cap and trade programme for existing buildings and the Green Building Programme for new ones.