"Sustainable town" by appointment – was not enough!

L. Anders
Stavanger University College, HiS, Norway

Abstract

The Minister of the Environment honoured Kristiansand with "Prize for the best environmental city": "Kristiansand gets the prize for it's long-term effort of town development in a sustainable perspective. I hope this prize will inspire the towns to put even more emphasis on the environment. Kristiansand is the example of the best practise, I hope other towns can learn from Kristiansand." "Hardly any other town in Norway have such a breadth in the work to develop a good town environment as Kristiansand."

Looking behind the rhetoric, it is difficult to see what merits this honour. The city of Kristiansand was appointed "*Sustainable City*" in a 7-year demonstration project, starting in 1993. But in retrospect and continuing the urban region is expanding, the journey to work is increasing and so is the use of the private car. The political attitudes seem to have become more environmentally friendly. Plans and programmes aiming at sustainability and better environment are prolific. True to say, there have been huge investments in repairing former sins but still, in comparison, the road investment was far greater. How can the divide between the Minister's rhetoric and substantive indicators be explained?

In a case study looking at land-use and transport policy in Kristiansand from the mid-eighties to date, we are searching for answers along three lines. Firstly, the planners' ideology was *Predict and Prevent* (stop the car growth, increase public transport). The established institutions however, followed the paradigm *Predict and Provide* (car use increases, provide more road capacity), and *the winner was*? An interesting result of the study was that the decision makers contrary to the planners, fast moved on and focused upon the global economy and competition between cities. Their ideology may be called *Predict and Promote.*

Keywords: sustainable city development. integrated planning. good governance. practical approach.

The Sustainable City III, N. Marchettini, C. A. Brebbia, E. Tiezzi & L. C. Wadhwa (Editors)

1 Introduction

The Norwegian government appointed in 1993 five *Sustainable Cities*. The mother of the UN report "*Our Common Future*" Gro Harlem Brundtland was then the prime minister. Kristiansand was one of these *Sustainable Cities.* However, looking back on the experiment that lasted seven years, the gap between the sustainability aims and the daily reality, seemed to have increased. One reason for this was huge investments in roads construction. What are the lessons to be learnt from this experiment, and do the lessons have any relevance for other cities?

The opportunities created by the car are many, but so are some of the negative consequences like global warming, congestion and traffic accidents. These driving forces have also lead to policy response. In this paper we concentrate on *land use and transport policy*. Most governments regard transport and land use planning as an important and necessary tool, and many western countries have outlined the policy in specific documents, like

- UK: Planning Policy Guidance – PPG 13
- The Dutch ABC policy
- In Norway guidelines RPRSAT

Common to these types of documents are the aims to:

- *Reduce growth in length and number of motorised journeys*
- *Encourage alternative means of travel, which have less environmental impact*
- *Reduce reliance on the private car*

This paper is built up in 3 parts. Kristiansand was by the national government appointed Sustainable City during most of the nineties, and in section 2 this sustainable city experiment is described and commented. Although not all goals were achieved, Kristiansand got the prize as the best on sustainable planning!

Parallel to the sustainable city experiment the biggest road building scheme ever, was planned and implemented in the same city, see section 3. Lastly the Kristiansand experience is discussed and some thoughts about planning and urban change are presented.

2 Kristiansand – the Sustainable City?

"Learn from Kristiansand" said the minister. In the seven years of being designated "Sustainable city" the paradigm: *Predict and Prevent* was propagated by the state. The predicted car growth should be curbed and public transport patronage increase.

Kristiansand was in the autumn 1992 appointed by the Ministry of the Environment (MOE) in Norway to *Sustainable City* together with Fredrikstad, Bergen, Tromsø and Gamle Oslo. When the MOE invited cities to this demonstration project, they got many applications. Kristiansand had a legacy of

The Sustainable City III, N. Marchettini, C. A. Brebbia, E. Tiezzi & L. C. Wadhwa (Editors)

being in the "planning front". Ten years before it got the prize Norwegian Cycling City, and was in the front of the environmental planning at the municipal level. Of political reasons they ended up with several cities being appointed. The sustainable city experiment was created when *Our Common Future* still was discussed in the media, and the hopes were high for a better world. This is clearly shown in the following statement: *"The aim for the Sustainable City experiment is to direct the development in a more environmentally friendly direction where the long-term perspective is to produce models for a sustainable city development."* A model for sustainable cities should be the end product of the experiment. There were six priority areas for the Sustainable City:

1. Land use and transport planning
2. City centre development
3. City dwellings and densification
4. Green structure, nature and recreation
5. Waste and recycling
6. Urban design and cultural heritage

In the outline for the experiment it is stated: "*The main challenge is to change the course away from the car driven expansion of the urban areas*." With this as the basic perspective, six tasks were defined. For each task a professional task force was set up to guide and advice the cities in their planning and implementation of projects. For the priority area - Land use and transport planning – all five cities including Kristiansand, should reduce car usage and CO_2 emissions by increasing the use of public transport. Certainly an ambitious goal!

The Sustainable City project was started without a laid out scheme for evaluation, hence there is no *Before* study! The traffic data from the Sustainable Cities is poor, because there was not in the beginning a plan for monitoring or evaluation of this national experiment. A mid term evaluation was presented to the Parliament, and the whole programme was evaluated in the autumn of 2000.

The public transport share of went down from 18% in 1985 to 10% in 1998. This decline in patronage has continued until the end of 2002. The MOE evaluated the Sustainable City experiment [9]. The modal shift from car to public transport was one of the stated aims, but the evaluation is not dwelling with that lack of achievement. The MOE main evaluation report [10] state that the most important results from the seven-year Sustainable City experiment were:

- It will take a long time to change the course towards more sustainability.
- Key projects make the future vision more clear.
- Sustainable transport is in the cities more ingrained both politically and administratively.
- A new policy for local community development was tried out.
- City Centre development was improved

This is hardly results that can be used by other cities as a model for "sustainable city development"? Even with massive backing from MOE and

The Sustainable City III, N. Marchettini, C. A. Brebbia, E. Tiezzi & L. C. Wadhwa (Editors)

active participation locally from both politicians and administration, the experiment did not change the strong structures supporting increased reliance on the car.

Specifically for Kristiansand is mentioned:

- The co-operation between central government, the roads authority, the county and the city of Kristiansand was formalised
- City expansion was curbed and densification promoted.
- The market place changed from parking place to "the city living room".

The city council political executive is in the self-evaluation report very positive to the experiment in Kristiansand, even if public transport use went down and car use increased. Is this because representative democracy has a strong preference for avoiding conflicts and maintaining consensus positions? The sustainable city project gave few quantifiable results. The planners and politicians got new insights into environment questions: "*the administration met new people and made valuable contacts*". The politicians got "*a stronger will to implement environment tasks*" and the administration's competence has increased and it has got "*more environmentally friendly values*". Even if these results pleased the council, they did not impress the press or the public. The following cutting from the planning journal PLAN is quite typical.

> ***The Sustainable City is less environment friendly.***
> *Good wishes and 100 million NOK were used – but the car usage has not decreased in the five Sustainable Cities Tromsø, Bergen, Fredrikstad, Kristiansand and Gamle Oslo.*
> *"It is of no use to promote public transport when the roads in the cities are expanded and improved," says project leader Kjell Spigseth.* Plan 1/2000

The project leader gives road investments the blame for the poor results. In section 3 we will see that was what happened in Kristiansand. However, the MOE is not willing to accept that the experiment gave poor results, rather the Sustainable City of Kristiansand gets a prize!

The Minister of the Environment honoured Kristiansand when he gave the Mayor "Prize for the best environmental city" for the year 2002. *"Kristiansand gets the prize for it's long-term effort of city development in a sustainability perspective. I hope this prize will inspire the cities to put even more emphasis on the environment. Kristiansand is the example of the best practise; I hope other cities can learn from Kristiansand. It is good foresight to improve the environment in the cities."* said the minister and continued: *" Kristiansand has worked systematically with a long time horizon to develop the city with overall structure, improved public transport and cycling network, attractive city space and green structure, cleaner river and waterfront, and good accessibility for all. Kristiansand has great breadth in its environmental approach, which spans from the cultural heritage to waste recycling and energy. The local authority is sitting*

The Sustainable City III, N. Marchettini, C. A. Brebbia, E. Tiezzi & L. C. Wadhwa (Editors)

in the drivers' seat for this work and has been active in promoting co-operation with Government, county, industry and the population. Hardly any other city in Norway has such a breadth in the work to develop a good city environment as Kristiansand."

What did the Minister highlight?
Time perspective: long-term effort of city development in a sustainability perspective. Kristiansand is the example of the best practise.
Comprehensive, integrated planning: Kristiansand has worked systematically with a long time horizon

- *to develop the city with overall structure,*
- *improved public transport and cycling network,*
- *attractive city space and green structure,*
- *cleaner river and waterfront,*
- *good accessibility for all.*

Management and Governance: The local authority is a) sitting in the drivers' seat for this work b) has been active in promoting co-operation with Government, county, industry and the population.

Broad approach: Kristiansand has great breadth in its environmental approach, which spans from the cultural heritage to waste recycling and energy. Hardly any other city in Norway has such a breadth in the work to develop a good city environment as Kristiansand.

Put in another words, one may according to the minister, look to Kristiansand to learn about: Sustainable city development. Integrated planning. Good governance. Practical approach.

What about the longer term? One result of the Sustainable City is the ***BussMetro*** proposal, which is promising. This is a concentrated route structure through the city centre, with high frequency and real time information giving the time for the next bus to arrive at the stop. The ***BussMetro*** will increase the quality of the public transport system a great deal. How it will be followed up with plans, investment and running costs, in the years to come, remains to be seen. However, it is not enough to improve the quality of the bus system to shift people from cars to buses. A balanced transport system also requires that parking policy and bus priority schemes support such a shift, together with other economic means and not least the land use and transport planning policy [8].

3 A study of land use and transport planning in Kristiansand

Parallel to the Sustainable City effort, another process was started. This was a huge project of building a motorway through the city. Road building amounting to one and a half billion NOK was planned at the same time as the Sustainable City project tried to curb car traffic! A qualitative study was done to look into the question: *How did the main actors at the city level look upon land use and transport planning and the Sustainable City experience?* The key actors in Kristiansand were interviewed and their stories were quite different from the impression one gets from the government reports.

The Sustainable City III, N. Marchettini, C. A. Brebbia, E. Tiezzi & L. C. Wadhwa (Editors)

The study was a qualitative study based upon interviews with carefully selected actors, combined with document analysis of data from archives and the local newspaper. The key actors involved locally were selected for interview. About 20 persons were interviewed, among them the mayor, the leader of the conservative party, the technical director, and the planning and environment chief from the municipality, and also the county planning director and the county roads director.

Interpretation of the results from the local study shows a completely different story than the official MOE evaluation of the Sustainable City did. The main planning problem in Kristiansand the last 15 years was to solve the capacity problems of the main road, the E18. How should E18 be built and when? With the present state road programmes, E18 would not be built until 20-30 years had passed by, and meanwhile the traffic growth continued. This was overruling all other planning problems.

The planning process started early 1992 with talks between the mayor and the county road director, both new in their positions. After reaching consensus between some key stakeholders, the county roads director a) designed the planning process, from start to finish, and b) implemented the new E18 motorway. The roads director's story goes like this:

"*When I started as road director I came from another place with clean sheets. People came to me and gave me advice and I went around and talked to people to get an understanding of the situation. It soon became clear that there was a lot of frustration of not being able to get the main road system solved. To me the problem included two separate parts:*

1. *I had to get understanding and support in Vegdirektoratet both for the seriousness of the situation and the need for Road Tolls, and*
2. *Road Tolls had to be accepted by the city council and the necessary plans had to be accepted ending up with a Local plan for E18, so that we could build the road.*"

The road director then designed the whole process, where ample time was put in for talks and getting support from people both locally and centrally. "*We took the key actors in Vegdirektoratet down here so that they could inform on the latest road building techniques and experiences from other places. This was a very good learning process which went both ways!"* said the road director.

This process of planning and building the new motorway went on without any direct connection to the Sustainable City project. They were "world apart". A token of this was that in the interviews none of the interviewees mentioned the Sustainable City directly as one of the most important tasks in the city in the nineties. Indirectly several took up sustainability issues through answering that the important tasks were: land use policy, densification, public transport, etc. All of the interviewed persons however, mentioned the expansion of the road E18 as *the major task*!

To understand the relative importance of the Sustainable City project and the highway project, the old saying "Follow the money" can be used. Construction costs for the E18 were nearly 200 million EURO, while the Sustainable City

The Sustainable City III, N. Marchettini, C. A. Brebbia, E. Tiezzi & L. C. Wadhwa (Editors)

project did only cost 2 million EURO. The highway construction meant that the city inhabitants would get socio-economic benefits for several years to come. If the investment did not take place in the city of Kristiansand, some other city would benefit from the state allocation. One statement further illustrate that the huge gap between the short-term benefits from road construction easily may overshadow the uncertain long term benefits from developing a sustainable city. "*Garnish*" the road director called a minor rebuilding of Dronningens gate "*we used some millions to make the street nice, it gave us a lot of good will*."

One informant described the Sustainable City project thus: "*The MOE gives us petty cash and at the same time the Ministry of Transport cuts severely in the public transport grant! We, the city and the county, have to put up a lot of money to follow up their ideas. That is not interesting!*" Thus the Sustainable City never caught on as the vision for the future among the actors or players with power, those who were dealing with the big issues in Kristiansand.

4 Discussion and conclusions

In the paper I raise the question what other cities may learn from a small city in Norway? The appointed *Sustainable Cities* did not manage to break the trends towards increased car dependence and use. Planning for sustainable transport development in cities must, it seems, adjust to the local political realities/the local democracy, and at the same time work with the institutions and organisations the state has created. We in the western world use the car more than ever, and the "car-owning democracy" as Maggie Thatcher called it [2], is a reality that the planners for increased sustainability are too little observant of.

"Learn from Kristiansand" said the minister. The tradition and history of planning in the city has been one of *Predict and Provide*. During the seven years of being designated "Sustainable city" the Government propagated that the old paradigm should be replaced by a new: *Predict and Prevent*. The predicted car growth should be curbed and public transport patronage increase. However, the city in co-operation with the state, launched at the same time, the most massive road building ever, with the clear aim of providing a transport system based on free car usage, the *Predict and Provide* tradition was upheld. Consumption of land and sub-urbanisation continues, car commuting increases in length and volume, and public transport declines. The leading politicians now actively use this experience in the marketing of their policy and the city under the new paradigm *Predict and Promote*, just like the Minister did!

The main lesson is that the city did not quite manage to reach the objectives that were set. The driving forces were too strong to be curbed. What lessons can be drawn for other European cities?

The main feature of European cities is age, being formed over centuries. Most of these old historic cities face challenges caused by the car: First, as an intrusion in dense historic centres, and secondly, dispersion, sub-urbanisation and urban sprawl. Thirdly, the increase in car usage has severe negative consequences: accidents, pollution (CO_2, NO_x, SO_2, etc.) noise, etc [1]. Associated with these challenges are the decline in public transport patronage,

The Sustainable City III, N. Marchettini, C. A. Brebbia, E. Tiezzi & L. C. Wadhwa (Editors)

land consumption and less walking and cycling. In their book *Urban Future 21*, Peter Hall and Ulrich Pfeiffer [6] write that planners and urbanites agree that the dense, mixed-use city with high quality transport is superior as a place to live in compared to the low-density, car-dependent, mono-functional suburbs around American and European cities. The problem is "*that people en masse seem only to willing to desert the well-designed, liveable urban areas for their inferior suburban equivalents. The statistical evidence is very clear: throughout the world, over the last century, cities have been decentralising.*"

Ten years ago, the driving forces were also underestimated. OECD/ECMT project group on Urban Travel and Sustainable Transport [4] proposed in 1995 a policy that would promote "less congestion, reduced energy consumption, improved access for those without cars, higher environmental standards and reduced overall costs." The OECD cities acknowledged at the time, that they have made mistakes in managing the urban travel, resulting in exponential growth of car traffic, congestion in city centres and serious air pollution. The countries in Europe had the opportunity to learn from the mistakes of western cities. But, in 2004 there is little evidence of such learning and indeed still a question if the cities in the western world are able to reach the goals of increased sustainability!

Susan Owens [7] poses in an article the question "Problems and policies: Learning from experience?" After reviewing the trends of traffic growth, congestion, decentralisation and environmental costs, she asks what went wrong?

- Increasing personal mobility has lead to physical separation.
- More and longer journeys, distance travelled doubled in 20 years.
- Complex geographical pattern and urban sprawl.

Owens like Hall and Pfeiffer is worried about a fundamental question "*whether trends towards greater mobility and dispersal are so deeply rooted that it would be extremely difficult, and perhaps even wrong, to attempt to change them*." Her conclusions are:

- Transport, land use and environment are fundamentally interrelated.
- Land use planning is an important means of maintaining accessibility and choice whilst controlling mobility.
- The need for demand management, for a cohesive transport policy framework, and for the integration of land use and transport planning has to be translated into social behaviour, which is a challenge.
- The urban future can be planned as well as predicted: sustainable land use and transport systems are a matter of choice.

Transport policy have through several decades been concerned with catering for the growing demand for travel by the provision of increased capacity. However there is a growing concern about the environmental impacts of travel, and the need for travel reduction. *Encouraging Travel Alternatives. A Guide to Good Practice in Reducing Travel* [3] sets out do demonstrate good examples, but also warns about the difficulties:

- Travel reduction cannot easily be measured and difficult to quantify.


The Sustainable City III, N. Marchettini, C. A. Brebbia, E. Tiezzi & L. C. Wadhwa (Editors)

- Travel reduction by a particular mode or to a particular destination may be offset by the general growth in travel by other modes or to other destinations.
- Travel reduction is usually small in proportion to overall volumes of travel.

Learning from "Best practise" or "others mistakes" may easily go wrong when applied in another social and cultural context. Nevertheless, I do believe there is a great deal of experience, which might be shared and used. One main lesson is that the Sustainable City must be based upon the citizens' decision. The institutions or "the rules of the game" must be changed accordingly after the principle of subsidiarity, so that the city itself decides, and not some sector interests like a highway agency.

References

[1] Banister David, et al, European Transport Policy and Sustainable Mobility, Spon Press, London 2000.
[2] Docherty Iain, Making Tracks, Ashgate, Aldershot UK 1999.
[3] EU Commission. Encouraging Travel Alternatives. A Guide to Good Practice in Reducing Travel, The Dante consortium 2000.
[4] OECD/ECMT, Urban Travel and Sustainable Development. Paris 1995.
[5] EU Commission, Time to decide, Brussels 2001.
[6] Hall Peter and Ulrich Pfeiffer, Urban Future 21, Spon Press London.
[7] Owens Susan, Integrating Urban Transport and Land Use Planning Policies, in ECMT Sustainable Transport in Central and Other European Cites, 1995.
[8] Pucher John & Christian Lefèvre, The Urban Transport Crisis. MACMILLAN Press, 1996.
[9] Strand Arvid and Ståle Opedal, Miljøbyprogrammet-hvordan gikk det? Plan no.4, Oslo 2000.
[10] The Ministry of Environment, Utvikling av miljøbyer. Erfaringer og anbefalinger fra Miljøbyprogrammet. Oslo 2000.

The Sustainable City III, N. Marchettini, C. A. Brebbia, E. Tiezzi & L. C. Wadhwa (Editors)