

Strategic Environmental Assessment for the structure vision Amsterdam 2040

In strategic environmental assessment (SEA) for plans and programs, alternatives are compared on their environmental and other impacts. The city of Amsterdam prepared a spatial structure vision, and applied SEA to develop alternative planning options using a set of pre-defined policy objectives. This SEA approach can work well for plans with a high level of abstraction. A condition is that a well-balanced set of policy objectives is used in which environmental issues have a fully fledged role.

SEA and structural planning

In a so-called 'structure vision', a long term spatial planning strategy at regional or local level is developed. A structure vision outlines the desired spatial developments of the area that it covers, and also explains which authorities and instruments will be engaged to achieve these developments. It is a guiding document for government, civil society, the private sector and for citizens that clarifies the spatial policy of the territory concerned. Structure visions are an integral part of the broader vision for the future of a municipality or a province.

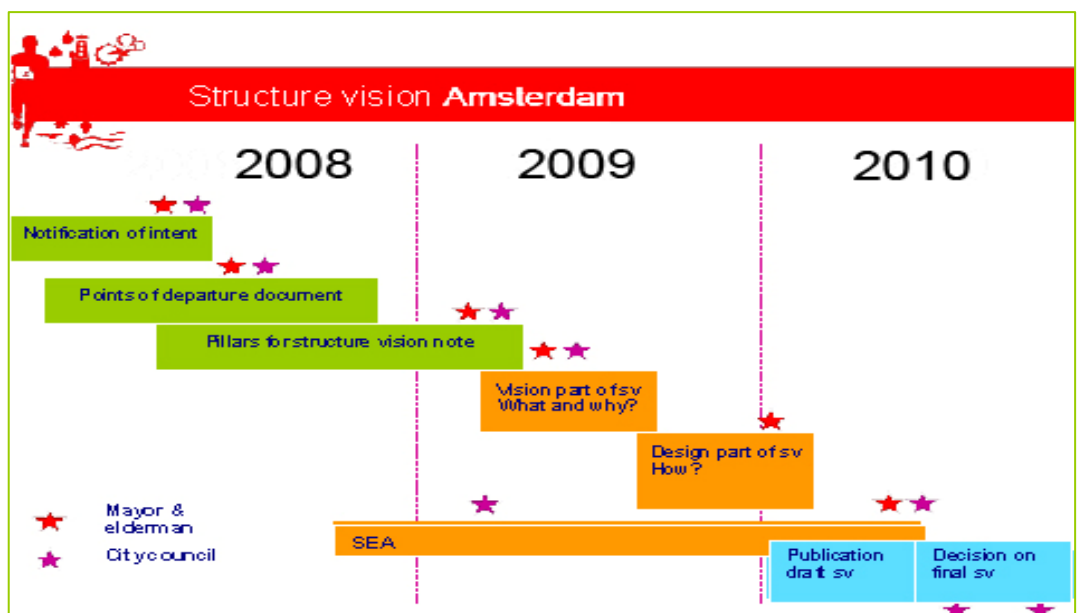


Aerial photo Amsterdam

Vision on the development of the city of Amsterdam to 2040

Planning formally started in April 2008, when the notification of intent (starting document) for the structure vision was published. This notification described the upcoming planning process. It was followed by a "Points of departure" document that set out the main spatial challenges for Amsterdam. This document was accompanied by an atlas called 'This is Amsterdam'. The document and atlas together were discussed with a range of stakeholders, resulting in a 'Pillars for the structure vision' note, which set the ambitions for the structure vision itself, and the scope of the SEA.

Since July 2008, all tiers of Government in the Netherlands (central, provincial and local) have to prepare structure visions for their area. When these plans contain activities for which EIA is mandatory, or when a Nature 2000 area could be affected, then SEA is required.



Public participation

While undertaking the SEA for the structure vision, the City of Amsterdam experimented with new forms of public involvement. More than was previously the case, specific stakeholders and the general public were consulted at the very start of the process. People were actively sought out to partake in meetings on the vision and SEA. Their comments and wishes were used as the building blocks for the structure vision. Over 2500 inhabitants of Amsterdam gave their views and ideas. On the basis of this information the administrators of Amsterdam defined their ambitions for the structure vision (the ten pillars). Consulting many parties at an early stage of the planning process proved a success. It led to more support for the final plan.

Ten pillars

1. The city's metropolitan core must be extended further by transformation along ribbons of buildings and by the demolition of barriers.
2. Amsterdam must offer a broad package of residential environments with an accent on metropolitan settings (high densities).
3. A regional public transport system must be the carrier of the spatial developments (missing connections must be filled in).
4. In Amsterdam there must be a clear connection between the structure of the green areas and water, and public space.
5. Amsterdam must offer space for varied entrepreneurial activities, with an accent on the knowledge economy.
6. The airport and a smart harbour for sea-going vessels are components of Amsterdam.
7. Amsterdam wants to be sustainable, climate resilient and waterproof.
8. Amsterdam should be socially sustainable and un-segregated.
9. Amsterdam's opportunities for tourism should be good and could be increased.
10. Amsterdam wants to accommodate the 2028 Olympic Games.



Public participation and consultation

SEA

In the 'Pillars' note, the ambitions were elaborated into several spatial tasks. Three spatial alternatives were presented in the SEA, each showing different ways to realize those tasks. A key defining factor for these alternatives was how each accommodated the desire to build 70.000 new houses. The alternatives differed in where the accents of urbanization were located: around the current city centre, along the river IJ, or in the Southern flank. Consequently, the alternatives were named: Ring-zone plus, Waterfront and Southern flank.

The 3 alternatives differed in:

- location of areas for housing and for work
- locations of areas for public transport
- location of the harbour area
- design of water and green areas
- reservation for location for the Olympic games
- use of sustainable energy

Comparison of alternatives

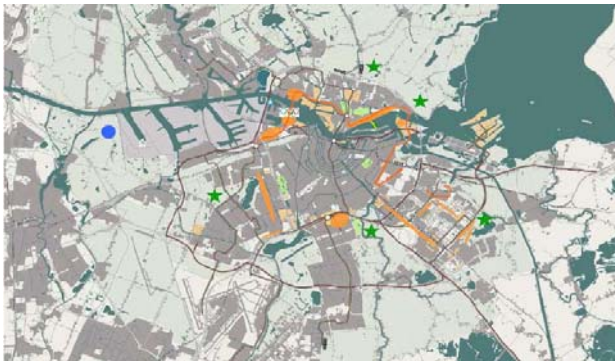
Within the SEA a framework was developed to compare the alternatives on their impacts and their contribution to the structure vision objectives. It contained the following themes and aspects:

Nature

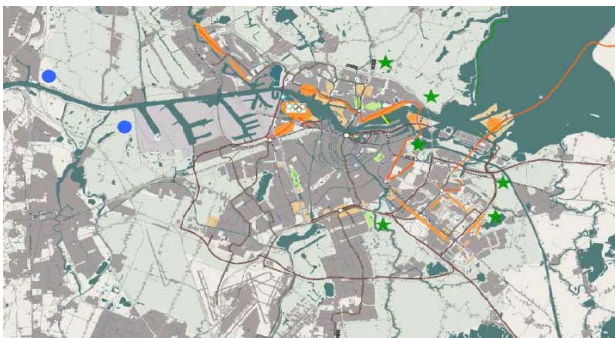
- impacts on (provincial) ecological corridors
- impacts on national buffer zones
- impacts on Natura 2000 areas

Landscape

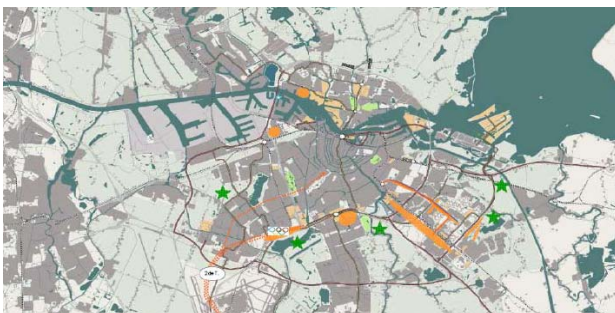
- connections, openness
- impacts on visual, culture history elements



Ringzone plus alternative



Waterfront alternative



South flank alternative

Legend:

- ★ Improved recreation in green areas
- New harbour area
- New housing/working areas
- New infrastructure

Climate proof (physically sustainable)

- energy and CO2, amount of energy savings and sustainable energy generation
- water: safety (flooding from sea/ rivers), droughts resilience, and flooding from precipitation

Living quality (socially sustainable)

- identity (diversity), flexibility, accessibility and ownership
- noise hindrance, air quality and social safety

Spatial economy

- industrial areas, availability and diversity of working areas

Mobility and accessibility

- transport networks
- modal split
- accessibility
- accessibility location Olympic Games

	Ringzone - plus	Waterfront	South flank
Mobility and accessibility			
transport networks	-	-	-
modal split	+	+	+
accessibility overall	-	-	--
accessibility location Olympic Games	0	0	++
Climate proofing			
safety (flooding from sea/ rivers)	-	-	0
flooding (from precipitation)	0	0	-
drought resilience	0	0	0

Fragment of the SEA summary table showing the comparison of the alternatives across the set of criteria.

In the SEA the alternatives were compared with each other, and also against the reference situation which represents “business as usual”, without the introduction of new policies.

SEA results

As is often the case, the final structure vision design was not so much a matter of selecting one of the three alternatives, but of mixing and matching bits and pieces of the range of alternatives into the *preferred alternative* for the spatial strategy. The SEA supported this process by showing the trade-offs between different options. However, because the preferred alternative had not been described in the SEA and the draft-structure vision did not substantiate how the information in the SEA had been used to select the preferred alternative, the city of Amsterdam supplemented the SEA with an explanation of the choices and arguments that led to the final structure vision.

SEA and climate proofing

A specific feature of this SEA is the extensive information on climate change adaptation and mitigation. The 'Pillars' note set high ambitions for climate resilience. These were translated into energy efficiency and CO₂ reduction goals. The SEA then compared different solutions such as heating/cooling systems based on thermal energy storage in (ground) water, and use of solar and biomass generated energy. The SEA also included an inventory of areas that were vulnerable to climate change impacts, specifically increased flooding in some places, and receding in groundwater levels in others. Finally, the SEA also looked into the CO₂ reductions that could be achieved by promotion of electric cars and scooters.

Quote of Amsterdam administrator

"Amsterdam has to grow into the urban centre of a metropolis region, into a city that can compete internationally, but at the same time maintains its quality of life. This is a physical and at the same time mental challenge. The Structure vision sets the framework for guiding this development into a metropolis in the right direction.

What kind of metropolis do we want to be, what are our qualities? How can you use the strengths of each area? In which way Amsterdam remains livable and green? These kind of questions can be answered with the help of the Structure vision. It is an instrument which shows us the future and which we have made to start a dialogue with the city. "



Impression of Amsterdam in 2040

Practical information on the structure vision and SEA

- This structure vision is slightly different in comparison to former ones (made every 5 years). Usually 70 % of the area covered by the plan remains unchanged; new in this case is the metropolitan approach in which not just the city of Amsterdam, but also surrounding cities/villages are involved.
- The budget for the structure vision was around 900.000 euro, including the SEA and the extensive public participation process.
- Decision making took place by the City Council, Mayor and Aldermen.
- The structure vision and the SEA have been prepared by a project team of about 20 people of the physical planning Department of the City of Amsterdam.

Contacts and further references

Physical planning Department of the City of Amsterdam

<http://www.dro.amsterdam.nl/structuurvisie>

Netherlands Commission for Environmental Assessment (NCEA)

<http://www.commissiemer.nl/>

<http://www.eia.nl/>

Special thanks to Wouter van der Veur – Urban Planner, Physical Planning Department City of Amsterdam. His presentation material was used in making this document.

This key sheet is part of a series, presenting experiences gained by the NCEA, working on Environmental Assessment in its partner countries. Please contact the NCEA for tailor-made support on EIA and SEA in your country: www.eia.nl or helpdesk@eia.nl