SIBBESBORG

EVALUATION MINUTES 16.1.2012

Sibbesborg: Competition For Sustainable Community Development

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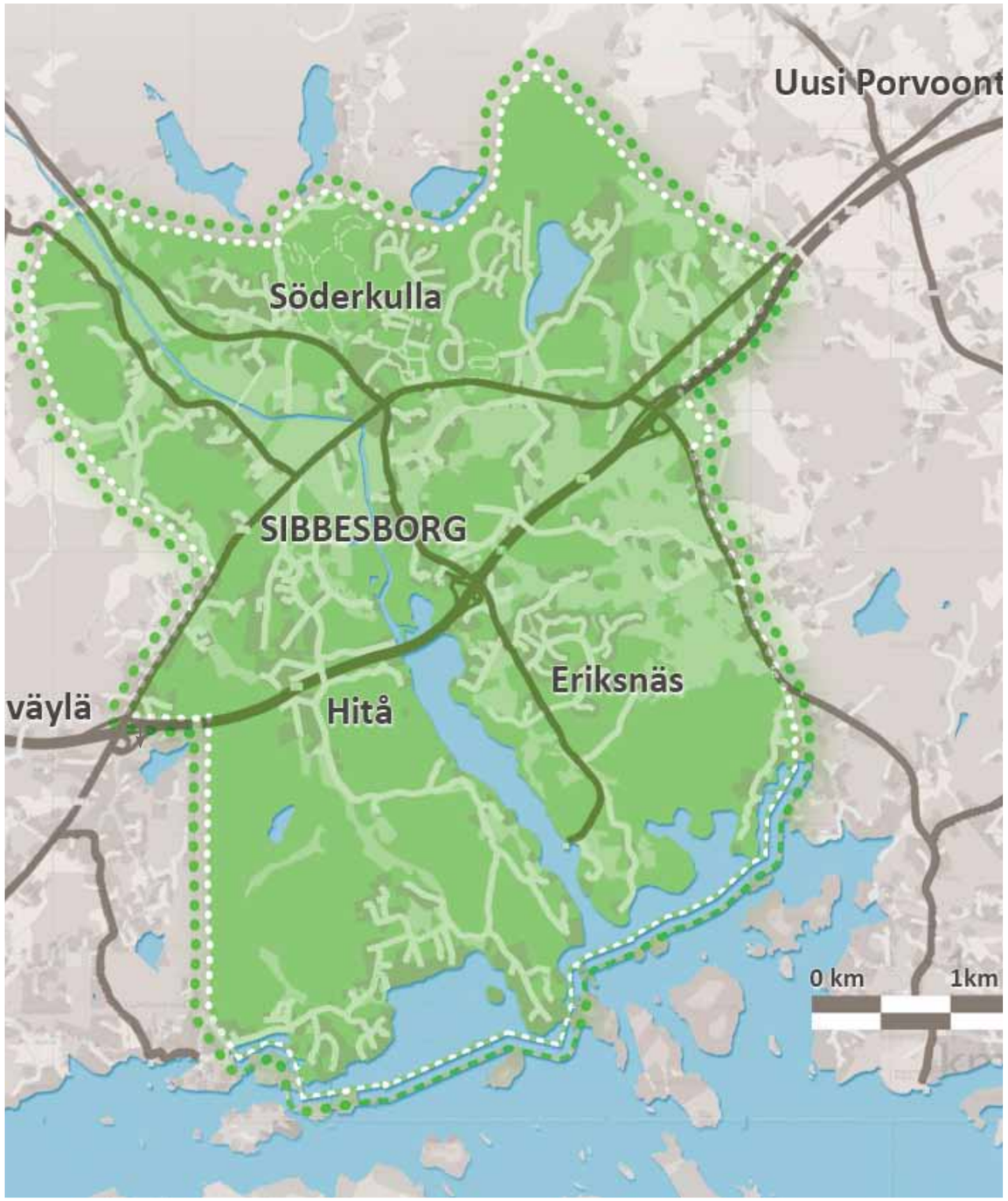
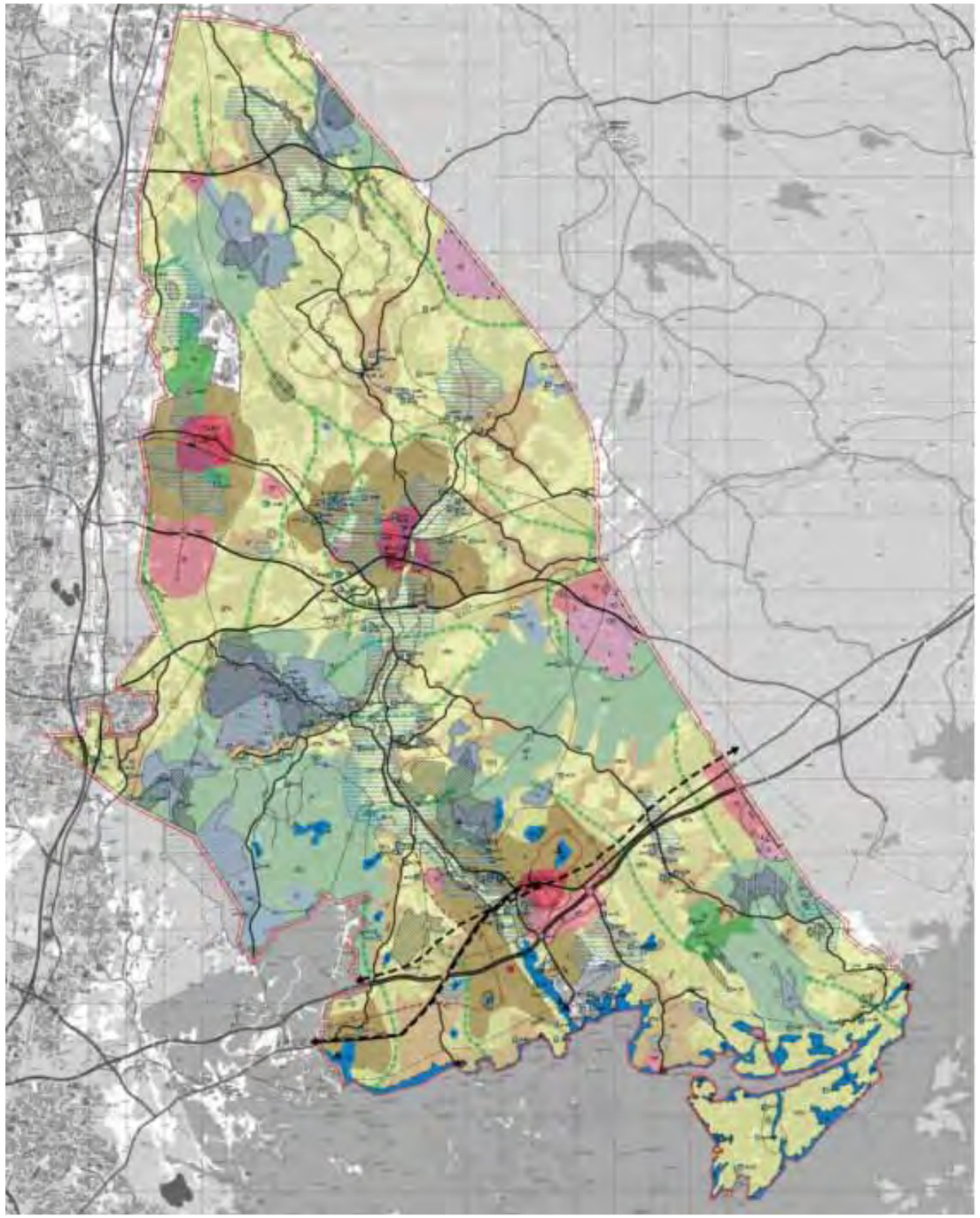


Map of the Competition Area



Sipoo Local Master Plan 2025, not yet finalised (jpg, 20.10.2010)

1. COMPETITION ASSIGNMENT

1. Competition Assignment

1.1 Organisers, Nature, and Objective of the Competition

During 2011, the municipality of Sipoo hosted an open international planning competition for a sustainable community in Sibbesborg. The competition was organised in co-operation with the Aalto University Department of Architecture, the Finnish Association of Architects, RYM Ltd and the OSKE Centre of Expertise, and was supported, through its sustainable community programme, by Tekes, the Finnish Funding Agency for Technology and Innovation.

The competition focus area is situated in the municipality of Sipoo, around Söderkulla urban district and the Sipoonlahti area. The aim of the competition was to submit a plan for a community of up to 70,000 – 100,000 residents, with the main emphasis on the centre. In addition to this, the target was to outline the first steps in the extensive implementation process.

The competition and its scope were based on the Sipoo 2025 Master Plan and the municipality's expansion strategy which is a response to the overall development targets for the Helsinki region, an area that is one of the fastest growing urban regions within the European Union. The development of Sibbesborg, which lies at the heart of the region's eastern development corridor, will be based on future rail connections. The development of the area as a compact and functioning community, building on its powerful landscape and cultural identity, offers a rich opportunity for the region as a whole.

The municipality of Sipoo hopes that one outcome of the competition will be to identify the best possible partners for the future planning and development of the area. Co-operation on overall and detailed planning of the area will be pursued with the award-winning competitors. The aim of the competition organisers is to establish how Söderkulla and the surroundings of Sipoonlahti should be developed in order to respond to local and international demands of sustainability both now and in the future. It is hoped that the experience gained through the competition may also be utilised in the planning of other communities and that it will aid in the development of new and advanced concepts for future urban areas.

1.2 Eligibility and Competition Team Formation

The competition was open to citizens of all nationalities. At least one of the members of each team was assumed to have the right to practise as an architect in his/her own country.

Such an extensive competition assignment demands competence in many fields, and competitors were encouraged to form multidisciplinary planning teams, with expertise in fields such as land use, habitation, transport, community management, ecology and landscape design, as well as in structural engineering, energy technology, the development of services and business operations, and in the fields of area development processes.

1.3 Competition jury and experts

Jury appointed by the competition organisers:

Board Chairperson, Christel Liljeström
Municipality of Sipoo

Board Member, Caspar Berntzen
Municipality of Sipoo

Board Member, Harry Hänninen
Municipality of Sipoo

One jury member, Hanne Aho, was unable to attend the jury seminars. Therefore, the competition organiser appointed a replacement, Harry Hänninen, a member of the Sipoo Municipal Council.

Development Manager, Architect Mikko Aho,
Municipality of Sipoo

Area Development Architect, Landscape Architect,
Sirkku Huisko
Municipality of Sipoo

Head of the Development Group, Dr.Sc. (Arch.),
Aulis Tynkkynen
Ministry of the Environment

International members of the Jury:

Professor Wulf Daseking
Director of the Freiburg City Planning Office
Freiburg, Germany

Professor Patricia McCarney
Director of the Global City Indicators Facility,
Toronto, Canada

Members of the jury appointed by the Association of Finnish Architects:

Architect Marja Sopanen

Professor, Architect Panu Lehtovuori

The Chairman of the Jury is the Development Manager of the Municipality of Sipoo, Mikko Aho.

The Secretary of the Jury is Architect Ilona Mansikka.

The jury consulted with a group of experts, which include the following:

Chief Research Scientist Pekka Lahti
Eco- and Energy Efficiency

Professor Jari Niemelä
Environment and Landscape

Dr. Marketta Kyttä, Ph.D.
Living and Lifestyles

Professor Seppo Junnila
Economic Life, Area Development and Implementation

Dipl. Eng. Mauri Heikkonen
Transport and Mobility

In addition to this, a research group at the Aalto University was invited to monitor, assess and report on the competition process. The group comprised the following members: Architect Aija Staffans, D.Sc., Landscape Architect Tiina Merikoski and architecture student Susa Eräranta, M.Sc.(Economics).

Neither the group of experts, nor the Aalto University research group nor the secretary of the jury took any part in the decision-making process.

In addition to this, an extremely wide range of interested parties, including experts and members of the public, participated in the planning of the competition programme and in commenting on the competition proposals on the competition website **www.sibbesborg.net.**

1. Competition Assignment

1.4 Competition Rules and Approval of the Competition Programme

The competition rules of the Finnish Association of Architects (SAFA) and the recommendations for design contests of the Architects Council of Europe (ACE) applied in the competition (www.safa.fi).

The competition programme was approved by the organisers, the jury and the Competition Committee of the Finnish Association of Architects.

1.5 Competition Documents

The competition documents were available free of charge. The programme and attachments could be downloaded from the competition website on www.sibbesborg.net, from which all of the other information relating to the competition was also distributed. In addition to this, the website offered an opportunity to explore material related to the preparation of the competition and the comments of the public on the competition proposals. Participation in the competition did not require registration.

The competition website will also be used to announce the results of the competition.

1.6 Competition Period

Entry to the competition was open from 14.3.2011 to 30.9.2011. A total of 30 entries were received. The content of the proposals accepted for the competition was published on the competition website soon after the end of the competition period.

1.7 Submission Rights

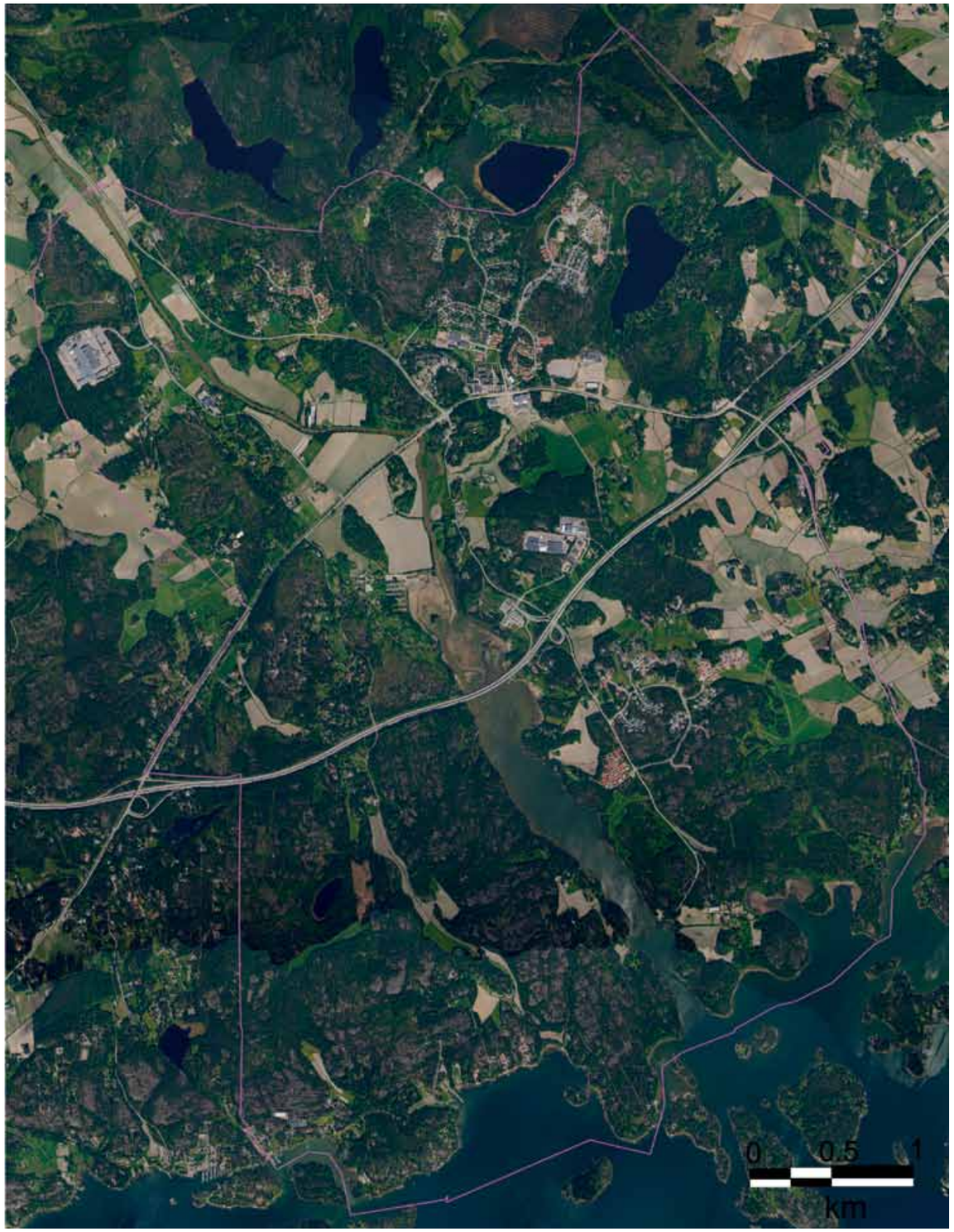
The organiser of the competition reserves the right of ownership of all awarded submissions, whilst the competitors retain copyright.

1.8 Retrieving Submissions

The submissions will not be returned to the competitors by the organisers. After the conclusion of the competition, the submissions that have not been purchased may be collected from the organisers within one month, up to 16th of February 2012. Detailed instructions on this will be displayed on the competition website after the results of the competition have been announced.

1.9 Competition Language

The competition languages were English and Finnish. All submissions were to be made in English.



Aerial view of Sibbesborg

Residential buildings in Söderkulla

Söderkulla Manor

2 BACKGROUND AND OBJECTIVES

2 Background And Objectives

2.1 Background of the Competition

The Helsinki region is one of the fastest growing urban regions in the European Union. Sibbesborg is located at the heart of the region's eastern development corridor, perhaps the most important area for the development of the metropolitan region – the Municipality of Sipoo.

The development of the competition area and of Sipoo is markedly different from that of the areas west and north of Helsinki, which have only been urbanised in the last fifty years. Up until recently, the growth of Sipoo was based on scattered agricultural settlement. Due to the pressures for growth in Helsinki and an annexation decision made by the Government, the direction of development in Sipoo has changed decisively. At the beginning of 2009, the Finnish Government passed a motion to annex an area of 30 square kilometres in Sipoo to Helsinki. The Sipoo master plan and the accompanying strategy for intensive growth were accepted in late 2008. The Sibbesborg competition is a crucial part of the plan to develop Sipoo as part of the overall metropolitan structure, and its results will be used as a basis for further planning.

The topicality of the competition and its vision is underlined by the ongoing revision of the land use plan for the entire region. The Regional Council of Uusimaa is currently drawing up a new regional land use plan, which should be ratified during 2012 (The Regional Councils of Itä-Uusimaa and Uusimaa merged at the beginning of 2011).

Through the competition, the Municipality of Sipoo seeks to respond to the increasing pressure on land use in the Helsinki region and thereby to rebalance the regional structure by expansion towards the east. The aim is to sustainably direct new urban structures towards, for example, rail transport development corridors and existing urban centres, such as Söderkulla. Being well-situated in Helsinki region, close to both a river valley and the sea, and alongside a projected rail transport corridor, Sibbesborg is an extremely attractive location for development.

2.2 Location and Surroundings of the Competition Area

The competition area is located in southern Sipoo, about 30 kilometres east of the centre of the country's capital, Helsinki. The competition area forms part of the rapidly expanding eastern Helsinki metropolitan area.

Situated on the coast of the Gulf of Finland, midway between the metropolitan areas of Stockholm and St Petersburg, the Helsinki region looks south across the Gulf, towards Estonia and its capital Tallinn. Connections to southern Europe are offered by the Port of Helsinki and the Helsinki-Vantaa International Airport, whilst the area is connected to the north and east, and to Russia, by high-quality road and rail links.

2.3 Competition Objectives

The fundamental objective of the competition was to identify planning solutions that would carry the Sibbesborg sustainable community from vision to reality. The competition assignment was to envisage the future town of Sibbesborg, its functions, urban structure and cityscape.

The competitors were also asked to include a description of the stages of implementation required in order to attain this vision. It was anticipated that competitors would submit ideas for a sustainable and controlled implementation process and its first steps, which would facilitate the gradual and flexible development of the area. The competition and development plan ultimately involve a process, whereby, from Sipoo's position, significant and rapid expansion will take place in a sustainable manner.

The competition forms part of the Sipoo procurement process and regional development plan. The future town of Sibbesborg must be viewed as both a self-sufficient small town, possessing its own strong identity and a lively city centre, as well as a component of the collective Sipoo centres.

Sibbesborg acts as a hub not only towards the sea and the archipelago, but also towards Nikkilä and Talma further to the north. The Helsinki region must also be taken into consideration in the planning process; as well as being an independent town, Sibbesborg will also constitute part of the network formed by the different centres within the entire metropolitan area.

The concrete competition aim was to examine how the Söderkulla and Sipoonlahti areas could be developed into a sustainable new town of up to 70,000-100,000 residents and workplaces in accordance with both locally and globally sustainable objectives, now and in the future. Concerning the planning process of Sibbesborg, the competition organisers´ aim is that the planning of the Sibbesborg sustainable community will proceed in an interactive and multidisciplinary fashion. Another important aim of the organisers was that by means of the competition, the municipality of Sipoo could identify the best possible partners for future development planning.

It is also hoped that the experience gained through the competition may be utilised in the planning of other communities and will help to develop new and advanced concepts for future urban areas.

2.4 Quantitative Guidance for Planning the Competition Area

Competitors were able to present a scheme encompassing 70,000-100,000 residents and workplaces, but fulfilment of the competition programme's qualitative targets was regarded as of greater importance than that of the quantitative ones. The competitors were able to define the extent of development suited to the area and define the principles of its gradual implementation.

The competition programme did not define an exact timetable for implementation, as the expansion is expected take place over a longer period of time. It is essential to recognise the factors that will allow expansion, and to which the expansion should be linked. These include the development of rail transport in the region. The competitors were able, however, to define a projected development timetable in their plans, based on the extent of development.

2 Background And Objectives

2.5 Unique Themes Linked to Sustainability

In the Sibbesborg Competition, there were five unique themes, all linked to sustainability:

- unique methods of organizing transport
- unique forms of eco- and energy efficiency
- a unique environment and landscape
- unique ways of living and unique lifestyles
- unique methods of organizing employment and services

During the evaluation process, the experts representing the five themes of sustainability, evaluated the submissions in accordance with the themed aims linked to their own fields of expertise. The assessments of the experts were used to supplement the work of the jury.

2.6 Basis of Evaluation of the Competition Submissions

When examining the submissions, the jury emphasised the following:

- the functionality of the overall plan for the area
- the innovative nature, high quality and originality of the solutions concerning the cityscape and urban structure
- the development of the ideas in accordance with the five themes of uniqueness, responding to the target themes
- solutions relating to sustainability and credible reasoning for these
- the viability for implementation and further development

During the evaluation process, the jury assessed the submissions on the basis of the above evaluation criteria. The assessments of the experts were used to supplement the work of the jury. The functionality of the overall solution for the competition area and the suitability for implementation and further development formed the principal basis for evaluation.

In the evaluation process the proposals were divided into four categories: upper, upper middle, lower middle and lower.

Before the jury's decision-making the competition proposals were set publicly available on the competition website, where they were assessed by the public. Public feedback on the competition website has been followed and discussed by the jury during the evaluation process.

Landscape south from Söderkulla centre

Söderkulla centre, picture from the west

3 GENERAL EVALUATION

3 General Evaluation

3.1 General comments

In the Finnish context of open architectural competitions, the Sibbesborg Competition for Sustainable Community Development was original and in some aspects even ground-breaking. The preparation was open and interactive, consciously utilising new and social media. The task was complex and challenging, calling for trans-disciplinary expertise from the participating teams. In the evaluation phase, the experts from the five areas of uniqueness actively participated in the jury's discussions, providing an opportunity for comparative analysis and benchmarking of the entries, even though the final decision remained with the jury.

This unusually broad and open process did bear fruit. We can already say that the Sibbesborg Competition became a platform for constructive discussion and mutual learning for all parties. The best entries were very good, providing holistic solutions both in terms of urban morphology, typologies and process, as well as specific sustainability themes. Taken together, the entries facilitate a rich discussion concerning the principles of sustainable urbanism, as well as the optimal local application of those principles to achieve attractive and balanced urban development in Sibbesborg.

The following paragraphs provide a synoptic view on the key issues of planning for a sustainable community, as raised by the competition entries and the jury's and experts' critical and comparative evaluations of them. In chapter 3.5 each expert expresses his or her view from the particular perspective of the themes of uniqueness.

ECO-EFFICIENCY, LANDUSE AND BUILT DENSITY

Eco-efficiency can be defined as a function of quality of life and the natural resources needed to achieve that quality. The definition mixes qualitative and quantitative elements, which often leads either to endless debates about values and preferences or to over-emphasis of the quantifiable dimensions of material and energy efficiency and high built density. Sibbesborg Competition provides good material to achieve a grounded interpretation of eco-efficiency. Key questions are how much land is used for construction and what is an acceptable and attractive density (FAR) of the built areas. The best entries combine comprehensive preservation of the most valuable forest, seaside, river and agricultural landscapes with creative urban design and process that help to reach higher built densities than currently typical in the Helsinki region, without compromising experienced quality. They also suggest completely new built environment types that simultaneously drive dense and diverse urbanism and provide social, cultural and economic facilitation for a long-term preservation of non-built landscapes. The competition shows that for Sibbesborg's central parts, the district-level floor-area ratio (ie. FARa including local streets and small parks) of 0.8-1.0 is realistic. This leads to about 120-150 inhabitants per hectare (note slightly different density and population calculation in Pekka Lahti's text, Chapter 3.5 below). Lowest densities for townhouses and other individual types should be at least FARa 0.25. It should be noted that because the living space per inhabitant has historically changed a lot, greatly influencing the population densities in urban areas, a prediction of the total target population for Sibbesborg is challenging. If we use the current living space standard, the building volumes proposed in the best entries would lead to resident populations of 57 000 – 75 000 in year 2050. On top of that, a significant amount of space is allocated to workplaces to ensure a relative self-sufficiency in terms of jobs. The results, thus, show that Sipoo's target of 70 000 – 100 000 residents and workplaces can be achieved in a balanced way.

URBAN PATTERN, SOCIAL STRUCTURE, RELATIONS BETWEEN CENTRE AND NEIGHBOURHOODS

When zooming in from the overall amount of land use, average built densities and population to urban structure, morphology and use-patterns, a set of highly important topics emerge.

1. The entries set the question, if Sibbesborg is conceptualized as a new town or as a group of more or less independent villages or estates. Below in Chapter 3.4 you will find a more detailed classification and discussion of the entries' general structures. Here it suffices to say that while the approach of independent villages is flexible and realistic thinking the current model of urban development, a successful initiation of a new urban centre, gradually achieving its own dynamic, was seen as more valuable and sustainable. Thinking future Sibbesborg both in the local and regional frame, a development of more than one truly interesting urban centre is unlikely to succeed.

2. A new town cannot be and should not be monotonous. The best entries show elegant ways to create distinguishable neighbourhoods through variations and gradients in accessibility, built density and programmes, as well as utilisation of historical and natural features. Organic and diverse neighbourhoods do not need big green belts as their boundary, nor simply defined centre points. Rather, they consist of unique articulation of many elements of the urban realm. Built this way, neighbourhoods can become recognisable social domains without the risk of social parochiality and one-dimensionality of program and identity.

3. Considering the unique natural and cultural landscape values of the site, especially the Sipoonlahti fjord and the river valley, a clear presence of landscape and easy access to large open park and natural areas was valued. This leads to the criterion of compactness as a complement to density. The entries show that an optimum between compactness and access to nature can be achieved through linear compositions, even though many other morphologies can also provide rather balanced results.

4. The morphology of each neighbourhood should provide for robust and varied network of streets and allow for a high variety of different block and house types, to support social and programmatic mix and life-work combinations. The built areas should not be considered as islands, but the surrounding landscape should be seen as an integral component of the system of public space. In best entries, the border between built and non-built was thematized as a key asset and public face of the new Sibbesborg.

LOCATION OF CENTRE, RELATION TO EXISTING VALUES

One of the most important single results of the competition is a thorough valorization of the location of Sibbesborg's centre. While the centre should be roughly in the middle of the area and near the motorway that provides regional access, the centre should not be split in half by the motorway. The area between existing Söderkulla and the motorway turned out to be the optimal location. This is enforced by the fact that all relevant rail options go through or to that area. In best entries this location is developed in such a way that the river and fjord landscape becomes the main environmental, public space and image asset – 'heart' – of the new town. A further advantage of this location is the possibility to rely on Söderkulla's existing services in the first phase. In the future, densification of Söderkulla will further strengthen the new Sibbesborg centre, ensuring a certain historical depth to the new development.

3 General Evaluation

ATTRACTIVITY OF PUBLIC TRANSPORT AND LIGHT TRAFFIC

The concerted development of public transport and new construction is of paramount importance. If people start to build their life around the private car during the first years, dependency on car is hard to change later on. Best entries show a combination of responsive phasing that reacts to the different rail options and related changes in the local network, and a strong and focused urban design strategy that minimizes walking distances and ensures the attractiveness of terminals. Because the rail connection (metro or regional train) will be built much later, probably in 2030s, Sibbesborg's first phase depends on buses. Utilization and further development of the existing Helsinki-Porvoo connection is the feasible first step. This further emphasizes the importance of developing the areas next to Söderkulla first, with careful and planned extension (likely to Eriksnäs first) that can be served with relatively frequent shuttle or pendulum line. Furthermore, the best entries take into account connections inside Sipoo and towards Northern parts of Helsinki region. Concerning light traffic, best entries encourage it by short distances and infrastructure which makes walking and cycling quicker and more convenient than driving. There are ideas of comprehensive grid of pedestrian and bike paths, designing street typologies for pedestrian comfort and "bikeability", using the principles of shared space, and valuing the pedestrian and cyclist over the motor vehicle.

NEW THINKING ABOUT RELATIONS BETWEEN CITY AND NATURE

The entries proposed very different approaches to developing the waterfronts of Sipoonlahti Bay and Sipoonjoki river. The fjord-like bay surrounded by forested rocks is a nationally unique formation. Cultural landscape of the river valley has clear values, while the river itself is protected as Natura 2000 site. There is, thus, a strong argument to leave this zone completely untouched, and to direct the new construction to forests and farmlands, keeping distance from the central landscape feature. This solution, however, has significant draw-backs. Firstly, Sibbesborg's urban structure will be divided in two not only by the motorway but also by the landscape zone, leading to fragmented development and less-than-ideal compactness. Secondly, the best natural asset will be left rather lightly used, which would be a pity both in the social and economic sense. The best entries suggested solutions that overcome the duality of a completely natural vs. a completely built waterfront. Jury came to a conclusion that the competition signals a rather urgent need to rethink our understanding of the relation between built and non-built, or city and nature. It is indeed possible to find regenerative spatial and programmatic solutions that ensure the preservation and even improvement of natural and cultural landscape values, while simultaneously providing for public spaces and urban uses. New hybrid and integral city-nature combinations show paths also towards contemporary urban production and economic value-adding through local food, education, experiences and experiments. The conclusion is, thus, that if carefully planned and managed, Sibbesborg's centre can take advantage of the great setting at the river and fjord, but a total urbanization of the waterfronts is not a desirable option. The city-nature relation is a relevant question also in the Southern seaside of Sibbesborg and Hitå forest, as well as in the Eastern agricultural milieu.

PLANNING PROCESS, SUSTAINABLE URBAN ECONOMY AND RELATION TO THE EXISTING LOCAL COMMUNITIES

New ideas for planning process and sustainability management were specifically asked in the competition brief. Taken together, the awarded and mentioned entries provide an excellent palette of process tools. Local currency (or communal debt) tied to lifestyle choices is proposed to create a new market for sustainable services and products; transfer of development rights (TDR) helps to preserve valuable areas through monetary compensations and incentives to land-owners; models of mass-customization, co-operatives and group building address the construction and housing market; new web-forums, networks and services promise improvements in gathering opinions, managing data and making decisions. A transparent and just process is the best guarantee to win the support of the existing community for the new development. The question is classic: whose city is Sibbesborg? Future Sibbesborg should be seen as an opportunity to develop cultural values and local interests in an organic way, not as a threat of something alien. Radical changes are inevitable in the coming decades, but the ideas and process tools proposed in different entries point to a real opportunity to achieve a uniquely Sipoo-like urbanization with added value to existing residents. An important issue is to keep careful approach to the already built areas.

DIFFERENT SCALES: FROM INTERNATIONAL TO REGIONAL, MUNICIPAL AND LOCAL

Finally, Sibbesborg is not independent unit, but closely tied to international, national, regional and municipal networks. A clear outcome of the competition process is that in this unique site only something special suffices. It would be a great failure to let standard developments, let alone sprawl, to gradually "eat up" the local values. Only a bold strategy towards truly fresh 21st century sustainable community and attractive urban centre can achieve the visibility and brand that raises the interest of key actors and thus ensures the resources, both human and economic, that in the end can make a successful realization of Sibbesborg possible.

3 General Evaluation

3.2 International Juror's Perspectives

International Juror's Perspective —
Professor Patricia McCarney, University of Toronto,
Director of the Global City Indicators Facility

The Sibbesborg Competition represents a unique opportunity for Finland, for the metropolitan area of Helsinki and specifically for the Municipality of Sipoo that will provide important lessons for other nations, urban regions and cities globally.

This international planning competition for a sustainable community represents an enviable opportunity for Finland that many communities already embedded in sprawling metropolitan regions can only reflect on. As Helsinki grows and expands spatially outwards along its eastern corridor, the Municipality of Sipoo, still distant enough to not yet feel the pressures of this growth, has time to consider its place and identity in this urbanising region, to establish its own unique spatial form in advance of this growth, and to engender the essential quality of life of its current and future citizens in relation to an outstanding natural environment on the shores of the Gulf of Finland.

Coming from Toronto, as an international juror to the Sibbesborg Competition, such an opportunity can only be regarded as rare and highly enviable. Already part of a rapidly urbanising region where small municipalities first on the near outskirts and now on the more distant edges of the Greater Toronto Region have been absorbed continuously over recent decades by often uniform sprawl, and where new hubs and suburban cores are more difficult to retrofit and to re-imagine identity, the opportunity for the Municipality of Sipoo to create a vision for itself in advance of such a metropolitan expansion is significant.

But the Sibbesborg Competition is more than just an opportunity for this "planning before the fact."-exercise. It is also an opportunity to demonstrate a better path for sustainable living in urban regions that holds valuable lessons for cities worldwide.

While Finland might well be seen as having extensive forests and land relative to other countries, and hence might be seen as being under no real and immediate pressure to be concerned about density or an urban form that would preserve this vast nature, this Sibbesborg Competition in fact established the framework for an acute shift in how to plan for urban growth in the Helsinki region. The boundaries of the competition area were sited and entrants were asked to consider the urban form to be established across an extraordinary setting of fjord, forest, river, seaside and agricultural land. The entrants were asked to consider a plan for the area that would build a sustainable community according to five themes of uniqueness.

The entries varied widely in terms of the total land to be consumed and the way it was imagined Sibbesborg residents would use and value their waterfronts. Some proposals envisioned continuous built-up form on both sides of the fjord, others designated rings of urban villages across the entire site while others concentrated settlements and opted to preserve large tracts of forest and waterfront. The urban cores, as a result, also varied considerably.

The site is constrained by a four-lane highway that traverses the site and crosses the river midway through the site. Entrants varied in terms of treatment of this existing structure. Some chose to locate the urban core around this expressway, and proposed various options such as burying some of its components, cladding over portions of it with retail along the water's edge, while others chose to simply avoid such measures altogether by locating the urban core further away from the expressway and the barriers it represented.

The jury's discussions on these issues were significant and while physical details across all of the entries were attended to, the bigger picture was seldom lost sight of, that is, the vision for a sustainable community in the outstanding landscape of Sibbesborg. Hence the discussion often moved to the broadest of questions on the relationship of urban citizens to nature, and alternative visions for future generations to embrace a quality of life that may not involve patterns of living and mobility that are predominant today.

The choice of awards for this competition thus reflects these highly valuable discussions of the jury that it was a privilege to be a part of. In the end, the jury agreed to recognise the winning entry that most embodied a vision for Sibbesborg that treats the landscape with care, that offered a view into the lives of residents embracing an urban quality of life that will be part of this landscape along the river, fjord and seaside, and that embraced a bold vision for urban lifestyles in the future that in fact offers up an alternative vision for cities worldwide that are confronting similar challenges associated with locations increasingly embedded in metropolitan expansion. The decision on the award for first place reflects an acute knowledge that "Helsinki is coming" and Sibbesborg will not accept a model of "business as usual" but instead will be proactive in creating a new model for metropolitan urban living that builds identity and community and informs a lifestyle that deeply connects social and cultural values with nature, landscape and sustainability.

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International Juror's Perspective —
Professor Wulf Daseking, Freiburg,
Director of City Planning

It must firstly be expressed that the best way to solve planning and building difficulties is through a competitive process. At this point, where the main concern is new city planning in extremely sensitive environments, the differing planning proposals allow for an intense discussion, supported by various perspectives. In this not so easy task, a space allocation plan for scenic and very sensitive areas should be inserted. A variety of submissions and entries with differing planning concepts is anticipated.

There must be an essential basis for the new conception that must adhere to the following:

- The planning of a compact city model as a "City of Short Paths",
- Planning of a city model that is very closely associated with the local public transportation system,
- The formation of differing building structures and frequency – in a mixed city – in order to achieve a social blend,
- Integration of workplaces, public, and private facilities,
- Conservation and the responsible handling of "natural resources" along with the incorporation of an inner and outer green concept that has an identifiable orientation. Additionally, the preservation of essential distinct landmarks must also be present (fjord, river, shore environment, wooded areas).

The goal should be, at this point, to build a new city that counteracts, through compactness, the urban sprawl in the countryside surrounding H elsinki. The chance to build an eco-friendly development, encompassing a new area should be possible using this method and manner.

The future town of Sibbesborg, where the residents will live in passive houses, where personal private motor traffic will be greatly reduced, where water and the countryside will be looked after, and where public and private infrastructural facilities and workplaces will be built could be the template for future cities in Finland. The competition is just providing the means to the end.

3 General Evaluation

3.3 Researcher´s Perspective

The Sibbesborg Competition as Research Subject

The Sibbesborg competition for sustainable community development was a bold and ambitious project, the implementation and results of which are also of a more general social significance. The project challenged traditional practices in architectural and urban design competitions with a view to developing the competition concept by giving greater weight to the requirements of sustainable community development.

The task of the Aalto University urban planning research team was to document the implementation of the competition and to assess its success in terms of its objectives. The study was conducted by monitoring the various stages of the competition, analysing the material produced during implementation, and conducting interviews with various actors responsible for the organisation of the competition. A research report on the results will be prepared in February 2012.

Multi-Disciplinary Collaboration and Interaction as Prerequisites for Sustainable Development

An increasingly prevalent topic in discussions around community planning and changes in the construction sector involves how sustainable communities are designed and built. Far-reaching sustainability goals require not only new ways of thinking in decision making and planning, but also new operative models and tools for long-term regional development.

The cornerstones of the Sibbesborg competition were multi-disciplinarity, interaction and internationality. From the beginning, the competition planning process involved open cooperation with experts of various disciplines and with locals. The public and experts alike were given opportunities to have their say regarding the goals, programme as well as evaluation criteria of the competition. During the project, several methods for promoting openness and interaction were tested, such as live online video conferencing and distance consultation with international experts. From the beginning, the key channel of interaction in the competition was its website (www.sibbesborg.net), where competition material was compiled, produced and distributed.

Communications in the competition also utilised the networks of partners, and information was distributed broadly in both domestic and international forums. Judged by online activity and enquiries received by the various actors, it can be said that the competition attracted a great deal of international attention.

Sustainable community development calls for multi-disciplinary cooperation, which in turn poses challenges for the evaluation of plans: What things can be presented in the planning documents? How are the plans to be interpreted? Which things should be presented in illustrations, which in written descriptions? What is the relationship between these two modes of presentation? Different experts read plans in different ways and require different things of the entries in order to judge them. The work of the Sibbesborg jury was throughout supported by a multi-disciplinary team of experts. The cooperation with experts began at an early stage of the planning process and continued in joint discussions at the evaluation stage, and it proved to be a valuable asset in the evaluation of the competition entries.

On the part of a small municipality, the Sibbesborg competition has been a bold step into the unknown. At the start of the project, it was not yet clear what stages the preparation of the project or the competition programming would require, or which actors or experts would be invited to participate in the project. A key factor which facilitated progress was that the network strengthened throughout and the entire process became more focused. The Sipoo municipality not only sought planning solutions for the development of the area, but also the best experts and partners for the planning and implementation phases to be launched after the competition.

The Sibbesborg competition was a learning process, and it is hoped that it will also be of benefit to others embarking upon similar projects. An undetermined process and multi-disciplinary cooperation require not only an ability to adjust to rapidly changing situations and needs, but also continuous progress monitoring. The experiences from the interactive, open and multi-disciplinary competition process in Sipoo are valuable for future regional planning competitions and public acquisitions relating to community planning.

3.4 Overall approach and structural typologies

In terms of their overall urban structure, the upper and most middle class entries can be grouped in five basic groups. Some morphological and social aspects of the different approaches were already discussed above in 3.1.

Circular chain of villages

A popular principal solution, allowing for flexible phasing, simple public transport system, manageable community size, and adaptation to landscape. Best entries in this category show a realistic start of the process through densifying the already existing areas in Söderkulla and along existing roads and bus lines. A potential problem is the often very long main street or tram line: is it feasible with the relatively low density of this type of urban structure? If the chain of villages extends to whole competition site, the length of the circular tramline becomes 15-20 km long, leading to travel time of 1 hour or more. Another potential problem lies in the service-base of the rather small units: with this model, it may be hard to create any really attractive and well-equipped centres in Sibbesborg.

Unified, new towns

Other rather popular solution, conceptualising Sibbesborg as one continuously urbanised new town. Entries in this category are characterised by a robust street network. Many, but not all, share traditionally urban features, such as closed or semi-open urban blocks forming the basic fabric in New Urbanist spirit. While clear and strong, the entries based on this approach tend to appear somewhat monotonous, failing to take best advantage of the varied landscapes or the historic features of the site. Quality in this category relies very much in physical urban design, good architecture and landscaping, dimensions that are not easy to control over the long implementation process.

Twin core & stripes

A hybrid type that deals with the possibility to locate the Sibbesborg centre close to Söderkulla, crossing the river valley or the end of the fjord. From this twin core, urban structure is extended in linear manner on the suitable and buildable areas both side of the river and fjord. This type facilitates preservation of most valuable landscapes while aiming at coherent urban form. Linear form of the built areas is able to combine urbanity and access to nature, maximizing the attractive edge of the built area. Public transport is easy to organise in an efficient way.

Scattered structures, based on place-based development

Some entries chose a place-based approach, developing independent urban fragments that utilise the most attractive landscape values. This category can be seen as realistic in terms of commercial development, leading to high added value and in best entries very interesting urban localities and novel housing opportunities. Lack of overall plan and long distances between estates, however, makes organization of public transport difficult and lead to less-than-ideal eco-efficiency.

Very dense and compact structure

Few entries proposed very dense and compact structures, greatly exceeding the currently typical built densities. These entries score high in eco-efficiency and may create attractive and visually strong urban icons. High-rise construction, however, was seen as rather unrealistic in terms of residents' prefences and managing the building process.

3 General Evaluation

3.5 General Expert Statements on Five Themes of Uniqueness

Mauri Heikkonen: UNIQUE METHODS OF ORGANIZING TRANSPORT

There are currently good road connections from the area to the east and the west along the Porvoonväylä motorway (Highway 7) and the Uusi Porvoontie trunk road (Road 170). The main internal route in the municipality is the Söderkullantie road between Söderkulla and Nikkilä. None of the entries suggested constructing entirely new main roads for the area. However, several entries included measures to mitigate environmental loads, such as roofing over transport routes or using tunnels. Other measures were also suggested to improve the adaptation of transport routes to the new urban environment. The most common solution for the internal transport network is a ring road around Sipoonlahti bay. This is often coupled with ideas to develop public transport in the area.

New rail connections are suggested to link the area to national and regional transport systems. Extending the eastern line of the Helsinki Metro to the competition area through Östersundom would link Sibbesborg to the eastern urban coastal zone and the centre of Helsinki.

A new high-speed rail connection between Helsinki and St Petersburg is currently being planned. There are two main alternatives for the line: one running from Pasila via Helsinki Airport, the other (the so-called Heli Track) starting from Tapanila in Helsinki and hugging the Porvoonväylä motorway. Both alternatives were presented in the competition programme. On 24 October 2011, the Uusimaa Regional Council decided that the high-speed railway line between Helsinki and Porvoo would be routed via Helsinki Airport in the regional master plan. The new line will run north of the Sibbesborg area.

It is still possible that a commuter rail link from Porvoo to Helsinki will be aligned through Sibbesborg. Its realisation is uncertain, however, and in any case it will not be constructed until sometime in the distant future. This transport connection is included in many competition entries. Instead of the railway line, the eastern extension of the Helsinki Metro could probably be substituted, even if this is not stated explicitly in the competition entry. It must be noted, however, that a different track gauge may to some extent also affect other land use plans in the area. The alternative, based on the extended metro line, would allow more stations to be established and its alignment could be more flexible. In the best entries, this issue was resolved by placing the motorway, the local railway and the metro line all in the same corridor, allowing the urban fabric of the area to be retained regardless of the track gauge.

The competition programme emphasised the development of pedestrian and bicycle transport. This was clearly taken into account in most of the entries. The entries differ with respect to the details and the scale of presentation. The best entries have clear non-motorised transport routes and a dense land use scheme that favours pedestrian and bicycle transport.

Pekka Lahti: UNIQUE FORMS OF ECO- AND ENERGY-EFFICIENCY

Only a few of the submissions showed a good understanding of the crucial issues in urban eco-efficiency and management of urban metabolism. Most of the entries seemed to be satisfied to cite common slogans of sustainability and to present nice diagrams but without sufficient and credible links to the proposed land use plan or urban design solutions. Quite a number did not pay enough attention to the simple fact that energy and material flows are directly proportional to the number of physical structures. To increase eco-efficiency, one needs to decrease the relative number of buildings and infrastructure. The causal relationship can be expressed as follows: the lower the areal density, the more extensive the networks that are needed, the lower the catchment areas and affordability of local services, the longer the trips. All these mostly direct impacts consume more materials and energy as well as carbon and other emissions.

Empirical studies in the Nordic communities show that 100% more land area per inhabitant means 50% more fuel consumption per inhabitant for transportation. The Sibbesborg Competition area allows new development for at least 100 000 inhabitants (equalling 5 million m2 of floor space), which implies 10 million m2 of land (1 000 ha, 10 km2) with even quite a low average residential density (Floor Area Ratio (FAR) = 0.5), equalling roughly 100 people/ha. This covers only 40% of the competition area (26 km2). With twice the density (FAR = 1.0) or with half of the population (i.e. 50 000 inhabitants), the land area needed is only 20% of the competition area. That is why those competition entries covering almost the whole area with new low-density development were not regarded as sufficiently eco-efficient, not only because of the excessive consumption of energy and materials in infrastructure and transport but also because much of the virgin nature areas were being taken for new development, leaving very few large natural areas for promoting biodiversity and recreation.

The assessment of the energy- and eco-efficiency of the proposals was based on four elements: energy efficiency, low-carbon impacts, ecological water systems and material flows including recycling (note: ecosystem services are not included here because they are assessed within the “environment and landscape” section). The focus in the assessment was on the proposed land use pattern, urban design concepts and comprehensive systemic solutions and their links to the descriptions of eco-efficiency principles. The key issue is the ability of the proposal to integrate relevant eco-efficiency targets into the actual plan and concrete urban form. Successful implementation is based on the following three steps:

- awareness of the central factors of urban eco-efficiency
- understanding causalities and interlinkages between urban eco-efficiency factors
- land use plan & urban design solutions reflecting and promoting eco-efficiency principles

Each of these three factors should be involved in the planning process in order to guarantee eco-efficiency as the bottom line. It is also possible, at least in theory, to end up with an eco-efficient urban form without a profound awareness and understanding. That is why the focus in the assessment was placed on the real expected impacts of the proposed urban form itself and not so much on the theoretical concepts, principles or other background information (text plus diagrams), which are of course important in the assessment of awareness and understanding.

In the best entries, the functional links between the arguments for eco-efficiency and the land use pattern or the urban form solutions are quite visible. In assessing the eco-efficiency of the proposed land use pattern and urban form solutions, the following categories can be recognised:

The most important argument promoting urban eco-efficiency is the overall land use efficiency (inhabitants plus jobs per land area or floor area per land area), which determines the basic level for service provision (whether the question is of social or technical services) and the consequent relative material and energy consumption. Depending on the actual locational choices of the development, it may also have direct impacts on the local natural water systems.

The second important element is the location of the gravity point as well as the location of individual development areas in the competition area and in the regional context. The accessibility to the most effective transport corridors and hubs in the region (the motorway and potential railroad and later on the metro line) depend on these locational properties. The accessibility in turn affects the average distances and energy consumption of external travelling and logistics. Together with the first argument, these links also determine the efficiency of the possible internal public transportation network (such as bus, metro or tramlines). The more compact and closer to the regional transport corridor the area is, the more efficient is the whole transport system.

The third argument is the internal structure and urban form of the planned area. This includes

(1) the network solution (linear, grid, dispersed, etc.),

(2) the size and shape of the blocks (small or large, which shape, etc.) and building typology (sizes, number of stories, detached, semi-detached, main construction materials, etc.), as well as

(3) the location of buildings in relation to the street network and other buildings (more or less close to the street and to the neighbouring buildings, orientation of roofs and facades, etc.)

These all have complex interlinkages. The urban eco-efficiency (especially relative energy consumption and local carbon sinks) is affected by the average length (or surface area) of the internal technical networks (especially transport, water and energy systems), the streetscape and the attractiveness of walking and cycling routes affecting the modal split, the typology of buildings including the construction materials (wood

3 General Evaluation

or other local or recycled materials), energy class and access to solar radiation or wind power affecting the net energy consumption, emissions, noise, etc.

The fourth argument is the energy production system as a whole in the area. Higher density enables district heating systems utilising eco-efficient CHP plants. Some areas (such as seaside coastal areas on hilltops or the "wind tunnel" of the fjord) are more favourable to wind power production than others. Some land use solutions (coverage of built areas, typology and orientation of blocks and houses in relation to sunshine, topography, etc.) allow more intensive ground heat or solar power and heat production than others (on roofs, facades or in separate energy parks), some ground conditions (such as the amount and accessibility of bedrock) allow a larger number of heat pumps and heat (or cold) storage devices than others, etc. However, in this type of planning and design phase and task, as in Sibbesborg, many of the above-mentioned issues in this category might not yet be necessarily relevant or at hand, but may materialise during the later phases.

Jari Niemelä:
UNIQUE ENVIRONMENT AND LANDSCAPE

This statement from the perspective of the 'unique environment and landscape' theme includes (a) Preservation of valuable natural and landscape features, and (b) Safeguarding of ecosystem services.

The submissions showed great diversity in their ways of treating the 'unique environment and landscape' theme. Many submissions took the preservation of valuable natural and landscape features into account fairly well and presented various approaches to maintaining such features. However, there was variation in how much natural areas were left undeveloped and where they were located. Thus, the degree of preservation of local biodiversity and ecosystems varied greatly among the submissions. Also, the degree to which larger green spaces were connected to each other and to green spaces outside the competition area (e.g. Sipoonkorpi National Park in the north) to form ecological networks varied considerably. It is positive that in many submissions the topography of the area was used as the basis for urban development but the way in which this was done varied a lot. There was also variation in how much development was focused in the Sipoonjoki valley and the fjord-like bay, which together form one of the most prominent and valuable landscapes of the competition area.

In most of the submissions, safeguarding of ecosystem services was treated very briefly. Very few submissions explicitly included the concept of ecosystem services. Issues such as maintaining green spaces for recreation (a cultural ecosystem service), storm water management, carbon sequestration (to combat climate change) and local farming/gardening (a cultural and production service) were discussed to varying degrees in most of the submissions but in many cases they were not elaborated or put into the context of ecosystem services. This shows that the concept has not yet thoroughly penetrated the land use planning profession.

Marketta Kyttä:
UNIQUE WAYS OF LIVING AND UNIQUE LIFESTYLES

The competition programme for Sibbesborg Competition for Sustainable Community Development defined five essential criteria for the theme:

1. A sense of community and a quality of life
2. Aesthetics and comfort
3. A rejuvenating, healthy and safe environment
4. Functionality and smoothly running daily operations
5. Culture and tradition in the planning process

These criteria, which were produced in the public participation process among inhabitants in spring 2011, can be visualised as a unique "quality flower" of Sibbesborg. The size of the petals of the flower refers to the relative importance of each criterion. According to Bramley (2009), social sustainability comprises two essential elements: perceived quality of the environment AND equal and ecologically sustainable access to essential local services and opportunities. Both of these dimensions were present in the "quality flower" of Sibbesborg, namely the petals represent perceived quality factors while the heart of it is accessibility. Therefore, the above-mentioned criteria can be interpreted to represent the local, unique aspects of a socially sustainable community in Sibbesborg.

The challenge in the Sibbesborg Competition was to find a balance between socially valued quality factors without compromising the ecological sustainability. In the Sibbesborg quality flower, the five petals may represent the attractive elements of the environment, while accessibility refers to the ecological and social boundaries. This classic dilemma concerning the integration of social and ecological sustainability is often reduced to the analysis of the social acceptance of urban densification in the research literature. In the competition, I expected to find a lot of serious reflection about this theme and some innovative ideas and solutions concerning this balance. This level of reflection I consider a higher-level treatment of the lifestyle dimension. It could also be treated by considering creatively new ways to promote ecologically sustainable lifestyles.

Many of the proposals invested in the creation of densely built, urban villages in close vicinity to forest but no proposal considered the social acceptance of this solution or elaborated on the question of how these villages differ from traditional Finnish suburbs. The concept of social sustainability was mentioned briefly in only one proposal. Most of the proposals were also very idealistic about the ecological everyday practices and lifestyles of the would-be inhabitants. I kept asking myself: why would the inhabitants in these settlements start to walk everywhere, grow their own food, slow down their living rhythm, and become active in their neighbourhood.

In regard to the lifestyle theme, the minimum requirement for the suggestions was to find planning solutions that would directly support the five quality criteria of the competition programme. At best, this should be done in unique and concrete ways. The entries offered few insightful ideas, even at this level. A few interesting solutions were presented that could produce an experientially rich environment. More often, single quality criteria, such as a sense of community and a healthy lifestyle, had attracted interesting planning solutions. Concerning the social interaction, I was surprised how few submissions had thought about ways to support interaction between existing inhabitants and the newcomers. Because the planning process in Sibbesborg has been exceptionally interactive, with an abundance of web-based tools, it would not have been impossible for competitors to somehow exploit this ongoing, real-life process.

All the submissions in the upper category, nevertheless, were among the best in regard to the theme's considerations.

3 General Evaluation

Seppo Junnila:
UNIQUE METHODS OF ORGANIZING EMPLOYMENT AND SERVICES

The fifth theme “Methods of organizing employment and services” is not a common evaluation criterion in planning or design competitions. However, in contemporary highly integrated structures, where substructures have a substantial influence on larger systems, it can be claimed that understanding of the effect of system functions on the sustainability of an area (economy, social and environmental) is important in the early design phases. The assessment of the unique employment and services tries to focus not only on the traditional What question but also substantially on the more dynamic How question, i.e. not only What is proposed (The Plan) but also How will this all work and be achieved? (description of the dynamics, documents, etc.).

The evaluation contains the substance categories as presented in the call:

- Creation of prerequisites and concepts for the generation of employment and services
- Accessible, high-quality basic and local services
- Support for private enterprise, tele-commuting and working from home
- Innovative concepts for local and virtual services
- Development of economic business in the sustainability, welfare and health services and tourism sectors
- Application of innovations and new technologies.

In addition, the plan and documents are scanned for more horizontal qualities. The emphasis in the plan is on the diversity and flexibility of different cost structure strategies, logistic hot spots with density, development vision with functionality and utilisation of unique local characteristics. The emphasis in the documents is on the clear presentation of the operation and business logic, evidence of end-user understanding, convincing driving concept and vision, utilisation of local services and small business, and the overall communication of the idea.

In general, the values of the theme were not well internalised in the competition. The main focus had clearly been on the traditional planning exercise and not on describing the operation logic of the development in plans and documents. The reason might be that the competition was positioned more as a design than as a system design competition.

The ideas related to unique services and employment that recurred in several proposals were local food production, recreation, new urban lifestyle, transportation hub, education, and research and development activities. In the overall assessment, no single proposal was identified as performing clearly better than the others. However, a handful of proposals had a good comprehensive approach for unique services and employment, namely the Playscape (2), Sibblings (7), Cycle ! (9) and Balance (15). The Letters (4), Selvedge (12), Daniel’s dream (20), Steps (14) and City game (18) were also found to present interesting ideas, such as online CAD manufacturing and the carbon capturing “timber hill town”, cheap energy everywhere, 2500W society, transforming development rights, to afford an international reputation to the area.

4 EVALUATION OF THE COMPETITION ENTRIES

4 Evaluation Of The Competition Entries

UPPER CATEGORY
UPPER MIDDLE CATEGORY
LOWER MIDDLE CATEGORY
LOWER CATEGORY

Proposals numbering refers to the order in which the proposals arrived to the competition organizer.

Upper Category

Proposal No 2
'Playscape'

Scattered structures,
based on place-based development

"Playscape" introduces a new paradigm – how to face the relationship between the built and the non-built environment. It can be seen as a statement of utilisation of landscape values. The most attractive elements of the competition area were recognised and utilised in the development. The project is attractive in terms of human scale and living environment, proposing a strong, place-based and culturally rooted development strategy for Sipoo.

The place-based dispersed structure lacks a clear overall morphological vision. The urban structure for the whole area is not on display, which makes it difficult to perceive the total extent of the development.

The development is divided into separate villages and towns at a distance from each other. The main high-density zone is in the Söderkulla area, next to the railway station, with long distances to green areas from the blocks in the middle. The other high-density area, "the fjord development", is located in a very sensitive landscape.

The urban structure displayed is feasible but not very diverse. The centre area in Söderkulla is surrounded by a street which limits accessibility. Some of the blocks have an unbalanced scale. Each village and town is intended to have a personal identity but it is difficult to evaluate the cityscape with only collage-type views.

Energy efficiency and the energy system were studied carefully, with grey and black water treatment, wind turbines and ground heat pumps.

Public transport is possible in this proposal, with a direct railway from Sibbesborg to the centre of Helsinki and to the city of Porvoo. The metro from Helsinki ends in Majvik. This causes additional change of transportation when going to the eastern part of Helsinki. An ineffectively long tramline along the coastline goes from Sibbesborg to Majvik, where it will connect to the Helsinki metro system. However, both connections to the eastern part of Helsinki are slow. Whether the railway will be built is still uncertain.

The railway station and town centre are located in the northern part of Sibbesborg. The railway serves well the northern part of the area but the southern part remains at a distance from the station and the town centre. The tramline serves only the right bank of the dense "fjord development". Local public transport operates with buses. Bicycle networks will be well developed. Collector streets on both sides of Sipoonlahti are going straight over hills and valleys without following the topography.

The development starts with the infill of the existing Söderkulla community in the north, which saves on resources. The rest of the new development is mainly a variation of linear towns located in several places on the most lucrative pieces of the landscape – coastlines, lake shores and loams.

The gravity point is close to the transportation nodes, the access to the motorway and the proposed regional train and Söderkulla community. This shortens the average regional commuting distances. The linear development along the coastline of the fjord area is basically eco-efficient, providing a good base for effective internal transportation and short walking distances to the shoreline.

Natural areas are preserved as large entities, but the southern seaside area wastes valuable natural resources by accommodating only a small fraction of the population. Many of the low-density sub-areas are car-dependent. The linear urban form dispersed in several independent parts far from each other increases the average internal distances (especially between the linear villages), infrastructure needs, trip lengths and transportation costs.

There is no detailed description of the urban form in the shoreline development areas. For instance, the points of management of flood risks and difficult foundation conditions on steep terrain areas are missing. Energy systems and carbon sinks are shown in the diagrams but they are not implemented in the land use plan.

The theme's unique environment and landscape are well considered. Relatively dense development is focused on some particular areas which leaves quite large natural areas undeveloped (e.g. in the north-west and south-west). The Sipoonjoki river valley remains predominantly an agricultural area. Also, within the developed areas, green spaces are retained. The different landscapes are considered as a basis for the urban development. From the point of view of preservation of valuable ecological and landscape values, the coastline of the unique fjord formation is heavily built upon and transformed. Development extends also along the coastline to the south.

Ecosystem services are not treated in detail, but storm water management, and an energy system based on renewable and environmentally friendly waste management are proposed, which is positive.

"Playscape" is an experientially strong suggestion: this comes across more through the proposal's visualisations, than through the text. The proposal is based on five villages that all have their own profile and identity and that are supposed to attract different inhabitant types. The identity creation takes place through architectural diversity and the playful integration of natural and built elements. The proposal is somewhat rooted in local culture. There is no convincing explanation about how the accessibility of villages and everyday mobility could be arranged in an ecologically sustainable way. The proposal invests in the perceived quality aspect of a social sustainable community but the accessibility dimension is not as strong.

The proposal has worked a lot on the theme of unique employment and services. It has created a clear vision and an agenda promoting it. The recognition of St Petersburg as part of the unique solution shows understanding of the wider perspective. Similarly, the realistic vision of toying simultaneously with different transportation options, the least risky existing highways but also the riskier new train connection, offers possibilities for balanced development. The "living and education hub" brand for metropolitan regions seems believable for the region. The attempt to integrate small- and large-scale services and offer a metropolitan lifestyle within a peaceful environment with highly conceptualised principle concepts could offer lucrative qualities to new-urban dwellers. The proposal also offers a bold but at the same time sustainably risky development option by showing an understanding of the importance of the financial value of sites and offerings for all purchasing power classes. The proposal has also some clear risks, namely having a two-centre solution with dense construction (centre and fjord) quite far from each other with no clear vision for the area in-between. Also, the tramline along the coastline seems not to be founded on realistic service premises.

4 Evaluation Of The Competition Entries

Proposal No 3
Next Stop

Unified, new urbanist towns

A very well-presented, holistic and complete project that develops a coherent strategy across all scales, phasing and sustainability themes. Different scales are well handled and the author seems to have understood the complexity of the task. The diagrams are very illustrative and show well how the urban structure develops in stages.

The overall plan shows natural placement of development and the solution takes the fjord into consideration. The development fills a rather large area but can be modified to adjust to both the landscape and topography. In its current guise, the developments are so unbroken and without green connections that accessibility is limited and the landscape is not present within the built area. The overall plan is composed of a chain with four cells and it gives a successful impression of short distances between the different parts.

On the level of urban design, the project creates a rather standard small-town environment, without urban or landscape highlights. A fairly interesting cityscape and an attractive urban structure are shown in the central area and variations of the blocks are well balanced.

The metro and railway are located in the northern part of Sibbesborg. Tunnels and decks over the motorway and railway line reduce the environmental impacts of traffic. The railway and metro serve well the northern part, while the southern part remains far from the stations and the town centre. There is a good internal public transport system, with circular light rail connections.

The development stretches quite evenly to all four corners of the competition area and large quantities of nature areas are consumed for new development. The population target with 100 000 inhabitants is relatively high. There is a realistic division into phases from 20 000 to 100 000 inhabitants served by buses, metro and lastly by internal light train system and regional train. Average densities, varying between 0.6 and 1.2, enable sufficient efficiency in infrastructure and service provision. There are long average distances to the regional transportation nodes, which are important for regional commuting and external logistics.

The regional analysis, including that of all neighbouring communities, is illuminative and realistic. A traditional European dense urban form, with an effective grid network and clear blocks and streetscapes, promotes walking and cycling. Local building materials, energy and food production are promoted in many ways.

The landscape and the environment are comprehensively treated. There are detailed descriptions of various approaches to the maintenance of green spaces. “Green meets blue” – this diagram presents how the green spine of the landscape meets the blue of the sea, and becomes an amenity for all the local residents. “Diverse ecologies” demonstrates that by creating an interconnected spine of diverse ecologies, Sibbesborg will be able to show its diversity of landscapes each with its own unique properties and spatial characteristics. “Stormwater” and “connected green” demonstrate how stormwater corridors can be used to connect green structures that preserve ecologically valuable landscapes along ecological corridors. Relatively large green spaces will be preserved in the form of wide ecological corridors or extensive green spaces.

Issues such as stormwater management and local food production are included in the submissions, but they are not explicitly connected to ecosystem services. A horseshoe structure of agricultural land for local food production is formed around the city.

This proposal is based on accessibility and the careful analysis of existing structures. It is an efficient, sensible and very logically presented suggestion. The careful analysis of the street network is the best part of this work: a street grid structure that is at the same time uniform and adaptive offers a wide variety of experiential spaces, acts as a key public space and attracts walkers, cyclists and public transportation users. Therefore, the proposal has concrete visions concerning functional quality and socially and ecologically sustainable accessibility. A solution that protects the coast from extensive development is a very democratic one. The proposal, however, says little about the aesthetic quality or other, more emotionally laden, quality dimensions.

The proposal starts to create a vision for unique employment and services, which is sound but does not seem to offer much new. It builds on the current “standard” vision for the Helsinki region in Sibbesborg and the uniqueness is thus partly missing. The employment and services drivers are innovation and knowledge development in the fields of sustainable technologies, information management and education, along with ecotourism along the coastline. These are all appropriate but the actual operational mechanism behind the ideas is still missing. As a minor detail, the hockey arena on top of the highway is a concept already presented in another urban region in Finland, and also the fierce competition from the Helsinki region does not support such major development. On the contrary, the overall idea of Green spine meeting Blue from the sea is well founded and could nicely support the unique employment and services structure development. The idea of the coastal cultural area strategy might offer potential, but at the same time it misses some development options: it should be very well integrated into the other parts of the region. The communication of the analysis of the proposal is exemplary in the work.

Proposal No 7
Sibblings

Circular chain of villages

One of the best overall urban structures of the competition. A strong public transport corridor following the motorway offers flexibility regarding different metro and train options. The main centres on the corridor are well located in the middle of the proposed urban structure, thus benefiting from the regional connectivity of the motorway. Secondary centres are proposed along the seashore on both sides of Sipoo Bay. The urban typology with central, urban and suburban environments is logical, and the staged development of the urban structure is well demonstrated.

A clear chain of developments is placed quite naturally, preserving the most sensitive fjord landscape; however, a dense seaside development stretches down to the seashore in Hitå. This is attractive but may prove hard to achieve in terms of environmental values. The motorway also splits the two main centres. The solution produces quite long distances between the furthest neighbourhoods and, in addition, there is no pedestrian connection between the two main centres.

“Sibblings” is a realistic proposal which could suit Sipoo, but offers very little real innovation on the urban structure level. In urban design and architectural solutions, the overall plan has turned to a rather familiar and even theoretical replica of an idealised early-20th century English town. There is hardly any variation in solutions across the different locations. The actual plans of districts and villages are not especially convincing. The blocks of the central area have a balanced scale but the overall impression is rather monotonous. The cityscape is comprehensive and well presented but is rather outdated and not very innovative except in the “Stenbacka forest town”.

To minimise the environmental impact the metro and railway are located in the motorway channel. Regional development will be possible due to the metro. Also, a railway connection is possible in the future. Internal public transport is based on an efficient circular bus line. The town centre is in the middle of Sibbesborg. It is easy to reach using all transportation modes. The existing Highway 170 will be developed as a local boulevard-type axis.

4 Evaluation Of The Competition Entries

Realistic building phases start with a bus system and continue later with a metro connection and a regional train. The population target with 57 000 inhabitants is smaller than the average. Extending it to 100 000 might be difficult within the same urban form concept or might lead to external satellites. The development is rather low density for an efficient urban infrastructure and service provision. A traditional European compact urban form provides an efficient internal transportation network, promoting walking and cycling.

There is a low-risk flood management requirement because the shoreline zones are mostly omitted from the new development. Rainwater harvesting and wastewater treatment facilities are introduced, as well as recycling centres for materials and local energy production through wind, solar and heat pumps. Carbon sinks are not proposed.

The environment and landscape theme is comprehensively treated and ecological values are well preserved. The designated nature protection areas have been taken into account and the main ecological corridors can be preserved, as the heaviest traffic infrastructure is located in the motorway corridor and the development is relatively dense. Large green spaces are left intact. The urban structure enables backyard gardens and allotments for many of the residents.

Ecosystem services are considered to a certain degree. For instance, the plan considers noise reduction through green spaces and traffic planning. Large green areas act as carbon sinks, as well as to improve air quality.

This is an exceptional proposal in that it includes some ideas concerning almost all the quality criteria listed in the competition programme. It has very concrete and elaborate ideas concerning the infrastructure that supports the sense of community at different levels. Urban nomads – the concept is an intriguing, new idea, if not a completely realistic one. According to the visualisations, the proposal relies on very clear, classic and distinguishable - perhaps easy to sell – aesthetics and architecture. The existence of a variety of house types in each township makes a longer-term rooting to a certain area possible. Also, the physically active lifestyle of the inhabitants is supported by traffic arrangements. Although the proposal does not clearly refer to local traditions or historical roots, it is likely that such ideas would be widely accepted by Sipoo inhabitants. The proposal even shows some thinking about what level of urban density is socially acceptable but at the same time guarantees a relatively efficient structure.

The proposal offers a solid and realistic foundation for delivering unique services and employment to the area. The idea of concentrating traffic into one channel and into two high-density locations, each with a commercial centre, is not novel but supports well the local conditions. The zoning seems to offer potential for a variety of commercially viable employment options and for services development, of both social and private types, as well as development of more high-quality areas. Also, the idea of a major wind turbine development could successfully support the idea of a “new urban” district, although the feasibility of the idea has not been studied. The quantitative evaluation of the proposal is better than average in the peer group, thus increasing the credibility of the communication. The development of the idea of linking the urban structure to services and employment is important, but is too narrowly described in the work. However, though the proposal is a solid and realistic presentation of the area, it lacks some aspects of surprise.

Proposal No 9
Cycle!

Circular chain of villages

A viable proposal incorporating a circular chain of villages combined with an organic outline. Despite the built areas being slightly too large and some inconsistency in positioning the centres, the project is one of the best at suggesting agreeable and sustainable new urban areas. The urban design is innovative with a well-developed landscape strategy and an approach to fit construction to the topography.

The ring of developments extends to the edges of the competition area, leaving large unbuilt landscapes along the Sipoo river and Hansberg farmlands. The plan has five centres, four of which are on the metro. The new core at Sipoo Bay, reaching over the motorway, is a bold move but remains somewhat detached from the real values of the competition area.

There are sharp, almost formalistic, boundaries between the developments and the unbuilt areas which might cause some difficulties when dealing with a rather challenging landscape. Västerskog outside the competition area has been included in the overall plan to support the transport system. In the east, the development stretches beyond the competition area to keep open the big landscape element of the valley.

The “Urban Loop” of the developments produces quite long distances between the most distant neighbourhoods. There are two alternative solutions in the implementation process related to the public transport but no clear distinction between the land uses of the options. The proposal would need some changes in the sensitive landscape of the Hitå area, where the development continues questionably close to the left shoreline. Building over the motorway is also rather questionable: it might cut the connection to the waterfront and the landscape

The varied urban structure produces rather interesting city spaces and well-proportioned blocks. The appearance of the cityscape is original and innovative.

The author presents elaborate and delightful studies of lifestyle and urban typology options using modular mass-customised housing. Residents will be encouraged to reduce their use of energy with an energy use monitoring system. The author introduces a local service company to manage retail and office spaces, car sharing and local energy services.

The rail connection from Helsinki is operated via a metro line, with three underground stations in the competition area. Bus lines connect Sibbesborg to Porvoo. Internal public transport is based on an efficient tramline system. The number of tram and bus stops is exaggerated. In the final stage, the length of the circular tramline will be about 18 km, leading to a maximum travel time of 1 hour or more. The metro also serves local traffic. Electric buses replace the tram and metro in the first phase. Sibbesborg centre is easy to reach using several modes of transportation.

The transport system consisting of trams, a metro and a possible railroad is rather excessive for 72 000 people. The transport corridor of the motorway and railroad is mostly unutilised. This increases the average regional distances to Helsinki and Porvoo.

The majority of the available land except for a big empty space in the middle is used for building purposes. Broad green zones between villages decrease the overall density and increase the network lengths and trips connecting the villages. Rather low-density village types decrease the average efficiency of infrastructure and services.

The steepest parts of the Sipoonjoki river banks are mostly preserved as natural areas, thus decreasing the average foundation costs. Flood protection measures are needed on the southern seaside areas. There are suggestions for using local materials, organic food production and soil recycling for green area construction.

There is a comprehensive presentation of the environment and landscape theme. The approach is to use the natural topography as the main layout grid for urban planning, and to maintain the main cycles of the natural ecological and water system through the establishment of green corridors, which also serve as connecting routes for residents as well as for animals between the green areas of the Sipoonkorpi national park. Built areas are located mainly on the ridges while the highest points are left unbuilt. The valleys form a mesh of green corridors that provides a network for the flow of storm waters and winds. In addition to the water cycle, wind formation, soil recycling, cultivation and nature protection are considered in a careful way. Locally valuable environments developed into eco-hot spot areas are part

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of a recreation network. Hot spots connect the local history, culture, health and sports with green areas and recreation. Overall, the approach taken in this submission appears to maintain ecological values and enhance fairly well human well-being.

Landscaping, storm water management, gardening & cultivation and soil recycling are among the issues that can be included in ecosystem services. However, these are not discussed in detail from the benefits to humans perspective.

The local unique environmental characteristics, natural topography, local history and the traditional way of life are clearly highly valued. One concrete example of this is the development of locally valuable environments into eco-hot spots. This is a good idea in a world where the lifestyle of all inhabitants is being urbanised regardless of the type of environment where they live. Therefore modern inhabitants may need some assistance in discovering the natural values of their immediate surroundings. Although it is not said, these spots could also act as meeting fora for the original and new inhabitants of Sibbesborg. Ideas related to the local service arrangements could support the sense of community, although this is not mentioned.

Maybe the most intriguing idea in this proposal is the mass customisation of various lifestyles and the resulting variation in housing supply. Sibbe max, regular, lite and classic are housing concepts that combine varying lifestyles with flexible but still uniform house-, block- and neighbourhood-level solutions. “Cycle” offers realistic, far-developed ideas that also concern everyday mobility and functional quality. Alternative mobility solutions are considered.

The proposal operates extremely well with a modular economy, but is still able to produce a versatile environment. The economic theory of mass customisation supports the approach, which helps people to understand and conceptualise their needs, but at the same time enables good delivery of the products. There are some challenging ideas such as the tram loop, which might be very lucrative but difficult to finance - especially when it is not clear how well the commercial hub serves local and other people. The identification of the potentials of the beaches and especially the marinas along the coastline clearly utilise the local possibilities. There are very few ideas concerning new services and employment, but the proposal of the large-scale use of local wood as a construction material generating a local area of expertise and experimental development of wood building is extremely interesting and shows a good understanding of aligning local, national and global interests in Sibbesborg.

Some development options related to the highways (hollow core) are excluded on purpose in the plan, which could be an asset, as well as a drawback for the proposal, depending on the overall management of the whole system under development. The idea of placing on local authorities a big responsibility to guide the development without providing them any actual mechanism for doing so, does not offer a very tangible and unique framework for operating in practice.

Proposal No 10
Nourish!

Twin core & stripes

A clear project with well-developed links on a regional scale, a sound and workable solution for the competition area, and extremely good local spatial, programmatic and typological ideas. An interesting vision of a twin town on the Sipoo river, with a well-defined, green and strong public space at its heart. From this twin core, well-scaled and located built-upon stripes extend north and south.

The final outcome shows a compact, integrated development with short distances. The centre is located in a natural setting near the existing Söderkulla housing development and it has a connection to the river estuary. The proposal gives guidelines, outlines where to build and what the urban structure could look like. The twin core creates a strong spatial starting point and future potential. The idea is easy to fine-tune to a more rational direction by reconsidering the balance between the two centres.

“Nourish!” is the only proposal leaving the most beautiful landscape in the Hitå area untouched. A lot of green areas can be preserved because of the well thought-out land use. Eriksnäs area provides connection to the sea shore.

In the twin centre, the proposal outlines the most innovative urban structure of the competition; the organic fabric creates urban streets and varied housing, enabling a naturally mixed social structure. Rich urban structure, with in a way a medieval atmosphere and interesting, variable and flexible blocks which enable mixing different building types. Innovative block typologies are well presented. The cityscape includes rather delightful architecture.

The rail connection from Helsinki is organised with a simple and effective metro line that ends in Sibbesborg. In the first phase public transportation will be operated with high-speed buses. Ending the metro line here can be regarded as a realistic conclusion. Metro stations are located in the northern part of Sibbesborg too near to each other and therefore the solution with two equal centres should be developed. The metro serves well the northern part of the area, while the southern part remains far away from metro stations and the town centre area. Local public transport operates with buses. Light traffic has been encouraged by the short distances and an infrastructure that makes walking and cycling quicker and more convenient than driving.

The size of the population is to some extent smaller than the average, 60 000 inhabitants, while the number of jobs, 22 000, is rather high, providing for relative self-sufficiency. The balance between dense centre areas and some low-density areas could still be improved. Dense centre areas decrease the total demand for infrastructure and internal trips. A metro line with two stations at the two gravity points is simple and effective. An interesting townscape promotes walking and cycling.

Wood and other local building materials have been utilised. The author puts forward the idea of nearly zero-energy houses only.

The presentation of the theme environment and landscape is relatively detailed and well –structured, with ideas of locally produced food, a zero-carbon lifestyle and urban lungs. Also, the proposed ‘Sibbesborg brand’ as the Finnish capital of local food highlights issues related to ecology and landscape: the lifestyle is connected to nature in a sustainable way. The most valuable natural and cultural landscapes are excluded from intensive urban construction as unbroken units, an ‘ecosystem services network’, which would need a more precise definition. Through its relatively dense urban structure, large green spaces remain as well as a green structure inside the urban fabric. Urban ecosystems, consisting of parks, gardens, green roofs and urban farming add to the “natural’ biodiversity”. The integration of “natural” and “urban” biodiversity is an innovative approach but unfortunately it is not elaborated on further in the submission. An urban green network provides ecological corridors between larger rural habitats and the urban green spaces. The network consists of visually, spatially and ecologically diverse green areas providing, for instance, sustainable storm water management and activity zones for citizens. Topography and microclimate conditions have been taken into consideration in the planning of the new urban areas.

There are many elements of ecosystem services included in the submission but the concept is not fully integrated into the plan. An “ecosystem services network” is mentioned but this concept is not elaborated on further. Local food production is emphasised, and green spaces produce recreational services for residents, such

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as hunting, fishing, gathering berries and mushrooms. The large green areas also store carbon.

This entry really nourishes local natural resources when it comes to food production, the preservation of the most valuable natural areas and the respect for local history and traditions. There are some concrete solutions as to how to promote a zero-carbon lifestyle: rather high-density villages with investments in light traffic solutions promote mobility using bicycles and the availability of a wide variety of local services. The proposal gives some thought also to virtual services and the local exchange of services.

Local food production has been brought into part of urban life. The goal is to create a Sibbesborg brand, a Finnish capital of local production. Local food production supports an ecological lifestyle and is guaranteed for all inhabitants, also for schoolchildren and inhabitants living in apartment buildings thanks to large balconies and terraces. Food production is also a crucial element of local identity formation, from children to the elderly. It should also draw visitors to Sibbesborg. The Eriksnäs leisure centre serves local inhabitants and visitors equally. These ideas were rare examples of solutions targeting not only inhabitants but attracting a larger audience as well.

The entry pays exceptional attention to ways of combining low-rise and taller buildings, which is an important characteristic of an eco-socially sustainable urban structure. The carefully designed network of trails and paths that are located in the most beautiful areas along the fjord and coastline promote a healthy lifestyle. Mobility without a car is further supported by other traffic arrangements and urban planning solutions.

The value proposition in the proposal is not clear in terms of unique employment and services. The idea of creating a lucrative crossroads for the metropolitan urban region does not seem to be unique for Sibbesborg but rather a concept that could be located anywhere outside the metropolitan core. Also, the underutilised potential of the highway restricts the sustainable development of unique employment and services. The plan has studied the idea of employment and services concepts more thoroughly but the accompanying documents do not come to the same level.

Proposal No 15
Balance

Unified, new towns

Well-argued, rooted and nicely presented strategy from regional scale to local urban design. The entry shows a very agreeable overall solution with natural placement of development, a respectful approach to the river valley and an exemplary location for the urban core. The proposal leaves room for variation and is in tune with Sipoo's existing and future plans.

The overall plan indicates quite well the intention to bring together Sibbesborg and the northern parts of Sipoo by reinforcing the cultural landscape in the river valley. On the other hand, this produces two separate developments on both sides of the river. The design system based on a continuous but adapted street grid creates quality, but in Hitå, the repetition of the same structure appears unwarranted. The full street network is not shown in the designs. East-west urban parks could be attractive in those places where the natural landscape supports them.

The proposal takes good cognizance of the landscape except for the Hitå area, where the development would need to be considerably reduced – Hitå is incidentally one of the areas proposed to be held in reserve for future light rail connections. In the other areas the landscape will be preserved and new highlights will be created. However, the entire built area is rather large.

The options for metro alignment are shown, but the conclusions are not clear as different lines lead to the same land use. The "Green Boulevard" in the centre seems somewhat unrealistic; such a long and wide urban space would need a large number of services to make it viable.

"Balance" introduces the best solution for the Sibbesborg centre; it is located in the optimal spot between the Söderkulla area and the motorway and shows also some innovative features. The rich urban structure is among the best in the competition: variable blocks enable mixing different building types and typologies. The cityscape is promising but the proposed architecture of the centre shown in axonometric view is rather confused.

For a sustainable tool the author introduces the "Sibbesborg co-operative", a regional organisation responsible for renewable energy production and the leasing and maintenance of community property.

The Helsinki–Porvoo railway is located in the motorway channel. The transport hub is located over the motorway in the centre. In this proposal there are two alternatives for the metro, a northern or a southern option. This means that land use is partly unresolved. The required changes are probably bigger than those projected in the case. The internal public traffic structure proposed comprises an automatic pendulum light rail and local buses. The underground also serves internal traffic.

The density in the residential areas varies between 0.3 and 0.7, which is sufficient for the eco-efficiency of an urban form serving 70 000 inhabitants. The flexible urban form might be extended for 100 000 inhabitants. On the other hand, the competition area is almost completely utilised for building. Protection of the river banks extends the distance between the eastern and western areas, resulting in a "divided city". Many green zones between the built areas decrease the overall density.

The traditional urban form with clear blocks and streets supports eco-efficiency. The "Green Boulevard" of varying breadth creates a nice townscape and supports walking and cycling.

The author presents an innovative idea to determine building rights based on lifetime carbon emissions. Energy-plus houses powered by solar energy systems are promoted. There is no explicit attention to carbon sinks or local material cycles

The environment and landscape theme is explicitly addressed. The natural settings are fairly well preserved and public access to the river valley and Sipoo Bay has been opened up. The plan respects the area's exposed bedrock and inlets carved out by glaciers during the ice ages. Thus, the unique natural conditions of the area are considered and are largely to be preserved. There is a green corridor along Sipoonjoki and several green zones run east-west. There are also several fairly large green areas located outside the densely built urban core. Overall, there are large green spaces in the plan and movement of humans and biodiversity through the area is secured by green corridors.

Ecosystem services are not explicitly discussed, but the large green areas surrounding the city provide residents with recreational services. The hydrology and storm water management are considered, as is gardening.

The proposal's key word is identity. Both the ancient historical elements of the natural environment and the much younger cultural historical characteristics are taken as starting points for the identity formation of the new Sibbesborg. The lifestyle-related issues are carefully analysed, although sometimes the ideas are rather mainstream. The division of city districts into "suitable-size" blocks is not a very original or concrete idea for the strengthening of the sense of community. On the other hand, the ideas as to how to make the virtual community really contribute to the sense of community are rather elaborate: establishing these services during the early stages of the participatory planning process makes possible the creation of the sense of community even before moving to Sibbesborg. The ideas as to what the current inhabitants might think about neighbours sharing their interests and lifestyles are valuable. If the virtual community formation were successful, then new ways to produce local services and support local entrepreneurs would also be possible. The influence of the displayed urban structure on social aspects such as promoting neighbourliness and a healthy lifestyle is not particularly well described.

The proposal offers a good platform and ideas for developing unique services and employment for the area. The idea of concentrating services and employment under the core theme of a "Green Boulevard" seems to be a simple but appealing approach for the development. The idea of connecting the Sipoo river valley to the logistical hot spots, Söderkulla centre, the marina and transport hub emphasises nicely the local characteristics. Another interesting idea is to play on the purchasing power of the highway users. The plan boldly draws on the idea: "The lower floor of the Main Street shopping lane can be seen from the motorway and this, combined with convenient parking and easy access, makes Sibbesborg an attractive shopping area for passers-by", but at the same time promotes the commercial development as a place for selling products from nearby forests and farms, all the way to the development of local organic food production and a technology knowledge centre for the area. The platform is interesting, but needs further study in order not to threaten the sustainability vision of the area.

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The proposal offers a nice well-structured development plan for the area. The services and employment development builds on the above-mentioned commercial centre idea, but has in addition some less well promoted ideas, such as a model to retain a property caretaker for every city block already in the city planning phase. However, the feasibility of those ideas is not studied in any detail.

Proposal No 24
Urbi et orbi

Very dense and compact structure

One of the few entries that proposes an immediately memorable and strong urban form, an independent and clearly shaped town. The chain of districts is organised around Sipoo Bay, creating a visually clear urban water landscape in the northern end of the Bay. While the proposal raises plenty of preservation concerns about the Sipoo river estuary, its condensed land use proposes good overall sustainability.

The clear structure focused towards the riverfront creates an almost iconic model, which easily provides a strong identity for the new town. The proposal has the potential to create a major new regional attraction. However, the solution makes the proposal in a way universal; it has no special connection to the site, even though it bases itself on making the historical sites part of the city structure. The chosen scale is badly proportioned for Sipoo.

A minimum area of the virgin landscape is used in the development, while large areas are left as a green belt around the urban structure. As a result, the development placed along a narrow area cannot follow the topography: to make the environment accessible, the terrain should be levelled when implementing the proposal. The whole fjord with its riverfronts is turned into an artificially built shoreline with no leftover space. Most of the development is located on valuable landscape areas. The proposal is not particularly loyal to the Finnish regard for nature, but it takes advantage of the site's overall potential to create a new town structure utilising effectively the most spectacular landscape in the area, the Sipoonjoki river valley.

The urban structure on display is rather monotonous and a good urban core is missing. The blocks have a very unbalanced scale; by providing the pedestrians with green lines around every small block, there is hardly any room for semi-private spaces in the courtyards. Placing the main block on the island referred to in the proposal, with ten to twenty storeys elevated on top of pillars seems to be completely over-scale. Without this proposed high rise the area needed for the population would be larger.

The implementation process is presented credibly and the possibilities to allow for phasing are good.

Regional public transportation connections are shown in this proposal, with the metro or fast light rail to Helsinki and the city of Porvoo. However, the metro station in the northern end doesn't serve the southern parts. The motorway is covered on both sides of Sipoonlahti. Internal public transportation operates through buses or a fast light rail link.

The compact size and form saves land and gives room to natural ecosystems more than any other proposal, and is very eco-efficient in terms of infrastructure and services. The population target is 74 000 but the proposal can be easily enlarged to cater for over 100 000 inhabitants.

The compressed circular shape of the town supports well the local fast light rail system, serving the whole new town very evenly. Short and relatively equal distances from all sub-areas to the shoreline and urban beaches strongly promote walking and cycling. The motorway is covered on both sides of the river with short decks to guarantee fluent, attractive, safe and noise-free walking and cycling. The motorway decks are, however, rather expensive and resource consuming in the investment phase and are only slowly compensated for by the benefits in the quality of the environment.

The environment and landscape theme is explicitly addressed. The principle of the design is to minimise the need to use virgin terrain for constructions. A large portion of the area is left as a green belt ("green lungs") around the compact city, with connections to the surrounding woodlands and villages. The city structure is pierced with green arteries (both built park and natural green spaces) as well as contacts to the shoreline and coastal zone. Assessment of the plan reveals that the extensive green areas both on the east and the west sides of the city are well connected to both the north and the south (except for roads) but east-west connections through the urban fabric do not function as well. The submission concentrates the urban structure around the Sipoonlahti fjord, which leaves major green areas around the urban core but creates a dense urban fabric along the shores of this unique fjord. It states that the shoreline of the fjord has a network of recreational functions such as beaches which may, to some degree, alleviate any negative ecological effects of the development. Overall, ecological issues are well considered in this submission but the dense urban structures along the unique fjord threaten its ecological values.

Ecosystem services are not explicitly discussed, but the extensive green areas surrounding the city provide residents with recreational services. The hydroponic vertical farm towers provide the community with food, as well as energy from the top-mounted wind generators. The landmark-type hydroponic farm towers next to the surrounding rural landscape are a bit questionable, though.

The proposal seems to be inspired by Italian culture, although it seems to take the local history very seriously. The idea of taking the four old manors as the starting point of the city plan is beautiful, but there is a danger that in reality they would be drowned in the very densely built, heavy urban structure. Piazzas for gathering are among the favourite suggestions for the promotion of the sense of community in Finland, but in reality (in this climate), they rarely work. The urban planning as a whole is reminiscent of traditional Finnish suburbs, with high-density structures located amidst natural surroundings. The question is: would they work better here, and if so, why? The entry says rather little also about the reasons "Cittaslow", slow living, would became a reality in this environment.

There are a few elements in the proposal that might create an experientially strong urban environment. For example, the visual connection from the central island towards the fjord, the gondola connection across the bay and the underground dock area are such elements.

The proposal does not show how the unique services and employment are to be created in the area. In addition, the idea of vertical farming seems totally out of place here, where the surrounding environment is full of vivid "horizontal" farmland and activities. The work has clearly emphasised standard "green" solutions instead of unique local characteristics. The proposal seems to lack the required evidence of end-user understanding in the work.

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Upper middle category

Proposal No 1
Layers of Nature

Scattered structures
based on place-based development

The overall plan shows a scarce amount of development with no actual centre. The Hitå area is totally separated from the other neighbourhoods. Preserving the forest islands results in a rather monotonous environment, with similar housing along the streets. The townscape includes personal but somehow strange architecture.

Public transport for national and regional connections is organised via rail and metro to Sibbesborg's transportation hub. A light rail and eco-bus system serves as the internal transport arrangement. Existing main roads have been preserved.

The principal idea of "forest islands" (new interpretation of the traditional Finnish "forest neighbourhood") leads to a dispersed urban form, extensive networks, long distances and energy-consuming travel behaviour. Later on, after the second phase, which infills areas within the forest hills, the proposal reaches a mediocre density (0.2), but never sufficient enough for eco-efficiency (0.4). Avoiding existing rocky hillsides may save construction costs, materials and energy, but building on soft lowland areas ("flat lands") beside natural watercourses may also lead to heavy foundation structures. Access of sunlight to all of the houses is regulated by house heights (max. 8 floors) and distances.

Heavy infrastructure due to low-density development leads to a high carbon footprint. Light rail supports low carbon targets, but seems to be too extensive for low-density or uninhabited areas. Carbon sinks (wooden structures or bioenergy) are not proposed. Forest islands support natural water systems and no artificial infiltration systems are needed.

Large areas in the south-west remain green. Preserving existing forest islands is an interesting and innovative approach, but buildings and roads disconnect the forest fragments. The fragments become very likely heavily used and they have no connections to outside green areas. There is rainwater collection and small-scale food production but no explicit mention of ecosystem services.

The proposal doesn't give much consideration to the sense of community and quality of life. The restorativeness of forests is present but everyday mobility with light traffic is not emphasised. The only reference to culture and tradition seems to be the all-Finnish closeness to woods.

The proposal does not have any clear value proposition to offer for unique employment and services. The promoted theme of a recreational area for Helsinki cannot be regarded as unique.

Proposal No 11
Put the Buckets Out It Is Raining

Scattered structures
based on place-based development

The overall plan has a rather clear structure, with four centres but long distances between them. The entry includes some interesting, some formalistic and a too tight urban structure with plain architecture.

There is only one railway (Helsinki–Porvoo–St Petersburg) for national and regional connections. This requires additional changes when going to the eastern part of Helsinki. The local light rail system is too large. Some streets are only for tram and pedestrian usage. The railway and motorway are in the same channel, which decreases the impact of traffic arrangements on the surroundings. The city centre is in the middle of Sibbesborg above the railway and motorway.

The plan is based on a single centre located in the current forest area and three sub-centres: Söderkulla, Eriksnäs and a western centre. The focus is on well-explained and developed water systems, while other aspects are neglected. A "Green factor" system giving points to individual houses is introduced.

A rather innovative proposal concerning the preservation of valuable natural landscape features. It is based on the hydrological system of the area. Valuable sites have been preserved and a green factor system introduced. Some ecosystem services such as storm water management and food production are mentioned.

This proposal says virtually nothing about living and lifestyles. "The virtual Sibbesborg" seems to be mainly for seeking information on ecological issues.

The proposal presents an interesting and well-founded process to develop the region. Also, the idea of providing a regional food oasis and controlling local energy production, when understood in a wider context than just in terms of the area under development, might offer a unique service and employment platform. The heavy emphasis on light rail might not be the most probable solution, but it does have a good public image. The flexibility, which is emphasised, is definitely an asset for a long lifespan, as required in this competition.

Proposal No 14
Steps

Scattered structures
based on place-based development

The development is placed in a natural and adjustable way, with no remarkable differences between the stages. The urban structure, both in the overall plan and in the centre, is very interesting. The cityscape is not on display. The presentation is quite reduced but in a way very convincing.

Because of the reduced presentation, without a general descriptive text and calculations, it is not possible to be convinced of the sustainable solutions.

According to the author, both the metro and railway are obvious transport solutions, but buses are economically more relevant, cheap and very flexible; fuel cell cars can make the overextended metro or railways a badly failed public investment. There are no new bridges over Sipoonlahti that might interfere with sailing boat traffic.

The final population target is 80 000 inhabitants. New seaside development creates attractive environments for housing. The rest is located in the forest islands. The Söderkulla area as a new centre is well located. It is supported by the new metro line and its station is in the centre - but only in the second phase (step 2.0) when the western part of the Sibbesborg area is built. The urban form is mostly based on large and rather eco-efficient round blocks, with internal and common large backyards. However, the low-rise principle (1-4 floors only) might leave the area density on too low a level, thereby increasing the demand for infrastructure unnecessarily.

There are zero-energy houses already in the first phase. A wind park with 20 large windmills is located in the uninhabited and probably sufficiently windy southern coast along the Hitå hills. The last phase (step 2.1) introduces solar fuel cells into individual houses - apparently when the technology is feasible and economical enough. "Permaculture" fields at the river mouth and the "Fish market" in the south probably encourage local agriculture and fishing as well as low-energy and low-carbon food markets in general. A high degree of

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pedestrian and bicycle routes support also a low-carbon transportation pattern.

The wetland at the mouth of the Sipoonjoki river is preserved for birds and other wetland species. The open Sipoonjoki valley supports free water systems and flood-proof development. Water systems in general are excluded totally from the proposals. Organic food production along the motorway might decrease food transportation and fuel consumption, but is somewhat challenging due to emissions from car traffic. Otherwise, the questions of material flows and recycling are excluded from the proposal.

The environment and landscape are considered but they are difficult to assess from the slogan-like text. Sipoonjoki valley is preserved and there are green spaces open to all. Ecosystem services are not mentioned.

The proposal does not provide enough information to allow the assessment of the uniqueness of living and lifestyles or services and employment.

Proposal No 16
Sibbesborg Hillcity

Circular chain of villages

A chain of developments with an easily understandable and well presented overall idea. The urban structure for the overall area is missing, but is presented in two partial plans that are quite interesting though sketch-like. The cityscape is not on display.

The target themes are presented in a clear and inspiring way but their descriptions are not among the most innovative and solutions to realise the plan are not given.

The metro and railway are referred to only in the text. The circular boulevard is the vein of the town. For the internal transport arrangements, there is a frequent bus service or in the future a tram circle.

A series of seven larger and eight smaller new villages along both sides of the Sipoonjoki can barely provide a small-scale, eco-efficient town with a sufficient population base for good service provision. The proposal's romantic view of traditional countryside villages is unrealistic in a modern eco-efficient society demanding high-level services within a reasonable walking distance. The Sipoonjoki river, its river banks and the valley form a broad green belt separating the eastern and western bank villages. This demands even longer infrastructure needs and decreases eco-efficiency. The circular boulevard linking the villages is also very long and under-utilised between the villages and thereby is not eco-efficient.

The urban form is based on large blocks that are not described in detail. The streetscape is reminiscent of traditional cities and the small village concept in itself supports low-carbon transportation modes, walking and cycling as well as public transport. The circular public transport service (buses and later on trams) may become uneconomical because of low utilisation as a result of long travel times and a lack of attraction points, while services might only be available in the next village. Energy-plus houses, solar and wind energy are mentioned but without any further explanations or detailed descriptions.

Local water systems are mainly preserved. However, the descriptions are extremely short or missing. Local building materials, especially wood, are promoted. Recycling is mentioned but without any detailed descriptions.

The environment and landscape are considered, but only briefly, and there are no particular innovations. The approach is to base planning on villages close to nature. Ecosystem services are not mentioned.

The cityscape aesthetics and comfort have been approached by experiential solutions related to water, lighting, materials and vistas. The clear urban structure makes it easy to orientate.

The proposal has some interesting features for unique services and employment, but does not offer enough information for its proper evaluation. Some ideas might also run slightly counter to the idea, such as locating the Sibbesborg centre in old Söderkulla and to position Sibbesborg as the last frontier of the Helsinki region. Contrary to the previous proposals, the idea of developing a town consisting of small rational units, "the villages", seems to support the local psyche.

Proposal No 18
City Game

Circular chain of villages

An innovative entry that cultivates the circular chain of villages towards an urban process strategy. The actor-based development process utilises a clear limit of development (cf. green field or metropolitan growth boundary) and supports economic devices and incentives. A palette of tools is given as the basis of the game to start the developing process with different interest groups and with a holistic view. Transfer of development rights (TDR), a system which is in use in the USA to promote preservation through monetising values, is used to ensure that all the landowners are willing to join the common process. "Sibbesmarkka", a local eco-currency, creates markets for sustainable solutions and land uses.

The urban design resolution fails to show how the actor-based game actually could work in the districts. The direct allocation of typologies, densities and styles has some merits, but is illogical concerning the main idea. The proposal invites inhabitants to play a game, but then again there are already quite clear plans for 10 villages or towns.

The presentation is very confusing. The proposed collage-like random urban structure of the developments is not adjusted to landscape and topography. The most intensive development has been dropped into the Hitå area, which has the most challenging landscape. The cityscape is not on display. Some pictures reveal the atmosphere but without a very convincing architecture.

National and regional connections are by means of a railway via Söderkulla and a metro line to Hila. A clear city centre is not created because the metro and train stations break up the city structure. There are efficient tramway loops for internal transport. A new bridge blocks the Sipoonlahti for sailing boat traffic.

In spite of the dynamic, game-like town concept, the author proposes a schematic layout of a series of 10 independent villages arranged in a double loop. "The Ring" is served with a mini-metrobus or tramline. The villages vary in size from 2 000 to 10 000 inhabitants, with district floor area ratios between 0.5 and 2.0. The densities are high enough to design an eco-efficient community, but the ideas are not presented in great detail and the basic ideas as well as their credibility remain vague. The

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highest density (2.0) is, surprisingly, in the most southern corner of Hitå and Vainudden, beside the sea in a "bold variant of towers in the park" complex located far from the main centre and services. This creates unnecessary transportation and car dependency. The idea of a clear district boundary, such as a city wall, is well grounded from the point of view of avoiding sprawl and increasing the eco-efficiency of the infrastructure.

The motorised transportation system is based on step-by-step improvements to the existing connections (motorway, metro-bus, tram and train). Trams and bridges across the river promote long-distance and recreational pedestrian and cycling traffic. A wind energy park is suggested for the Vanudden area.

The real-time monitoring of the carbon balance helps to guide the development not only during the initial phase but also in later ones. All of the villages have predetermined and binding carbon limits to follow. The local "Sibbesmarkka" eco-currency promotes eco-efficiency solutions in the long run. Parking places are all private and can be paid with the eco-currency, which promotes lower car dependency and low-carbon transport behaviour. The future metro and train lines are connected to the local circle line, acting as a feeder system along different points of the circle. The interaction of the three public transport systems in this way seems sufficient and is quite realistic - and supports low-carbon traffic habits.

Water systems are not analysed or otherwise actively taken into account in the proposal. The focus is on the waterfront utilisation. Gardening, planting and harvesting of the surrounding areas are mentioned but there is no account of construction materials or recycling issues.

This innovative, but theoretical, entry introduces a green strategy with good principles as well as an ecological economy. Some ecosystem services such as a carbon balance and an ecological economy are mentioned.

The proposal offers some interesting ideas, such as 2500W society, transforming development rights and a local eco-currency "Sibbesmarkka", to bestow an international reputation on the area. However, the ideas might not serve, as such, the local communities, as they would need substantial administration. Nevertheless, the proposal has other qualities, presented in the "recipe for plurality" that could be a good platform on which to start to viably develop new Sibbesborg.

Proposal No 19
Fantastic Four

Twin core & stripes

This entry has promising concept schemes and a clear presentation of the urban structure developing in stages but there is no clear hierarchy in the overall plan comprising four centres: the development fills the whole area.

The urban structure for the entire area is missing, but is quite interesting in a partial plan of the centre. The author's suggestion for the sensitive landscape of the Hitå area is to construct the buildings in a very light way and to detach them from the ground using stilts. The old Porvoontie is turned into a town boulevard with buildings on each side.

The author introduces tools to lower the NIMBY effect by increasing co-operation at the early stages of decision making. There are inspiring ideas for outdoor activities such as an outdoor art gallery, routes defined by different themes usable for all seasons and canoe safaris to Nikkilä.

Comprehensive, partly fresh ideas to eco- and energy efficiency are presented: geothermal and biogas energy, different scale windmills, services grouped to form energy-efficient combinations and roofs fully utilised as gardens, solar parks, or for windmills or other environmentally viable purposes.

National and regional connections are organised via the railway to St Petersburg via Helsinki-Vantaa Airport and the metro from Helsinki to Sibbesborg. Mobility hubs are created in all four areas. The metro and city centre are too far from the southern parts of the city to reach with light traffic. Uusi Porvoontie is turned into a town boulevard. Internal transport arrangements are supported with electric city bikes, rowing boats and self-service ferries.

The population target of about 97 000 inhabitants is relatively high. The four main sub-areas are located at the four corners of the area divided by the motorway and the Sipoonjoki river. Each is then subdivided into smaller parts separated by "generous green belts", which decrease the areal density and overall eco-efficiency. In addition, there are new floating development areas on the river for detached houses. The twin towns of Sibbesborg and Joensuu on either side of the river concentrate most of the development, enabling the small-scale new town development based on walking, cycling and public transport. Eriksnäs and smaller eco-villages complete the proposed urban form, with more differentiated development, possibly for high-end customers.

Local heating energy is produced in centralised hybrid geothermal and biogas plants. Solar heat and power production is integrated in house roofs. The motorway mid-zone is used for wind energy parks, which may contradict current motorway safety regulations, but the windmills could be transferred also to either side of the motorway. New planning concepts and regulating instruments (such as a set of codes bringing together certain criteria for reaching a minimum level for an approved plan) are suggested to promote ecological as well as other sustainability targets.

The aim is to create a zero-carbon region. The light rail system is introduced during the second phase (when 40 000 inhabitants are reached). Porvoo motorway is converted to a city boulevard which slows down the vehicle speeds and improves the slightly low-carbon targets for car transportation, but it also allows new development closer to the motorway, intensifying land use and increasing eco-efficiency. During the third phase a commuter train is also introduced to both Porvoo and Helsinki airport (through Nikkilä). Leisure time traffic is minimised by local recreation facilities.

The river estuary is opened up to create a place for recreation, commerce and culture. This is probably only a functional and aesthetic improvement and might not be such an ecological one from the point of view of biodiversity and ecosystem services. River banks are mostly preserved which is good for flood management. Rainwater is gathered and treated on the spot.

Local organic food production is promoted by gardens and allotments in specific sub-areas. Waste and waste water are recycled and used for biogas production. Wood and recycled materials are recommended as construction materials, timber especially, in the Hitå eco-village area.

The environment and landscape are considered with a solid and professional touch but there are no particular innovations. Green spines, green belts and other elements are proposed but in a traditional way. Ecosystem services are dealt with to a certain extent; there are ideas that consider storm water management and a zero-carbon area as a goal.

The entry includes only a few common ideas as to how to realise the sense of community and a quality of life but some fresh functional ideas such as art in the forest and spas by the sea.

The proposal has some interesting embedded ideas for unique services and employment, such as the concepts approach, with good analysis of the concepts and recognition of transport. However, the ideas are not explicitly expounded upon. Also, the actual drivers for the model are missing.

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Proposal No 27
Fjordscape

Scattered structures, based on place-based development

A clever landscape-based strategy shows how to combine landscape values and development. An innovative approach to focus new construction on the most human-friendly and ecologically less-sensitive zones, such as hillsides following rivers, valleys and open farmland. Thus, the hilltops and valleys are left in their natural states. The urban morphology remains Ralph Erskine's best work, but a detailed level is not well shown.

An interesting overall idea with ribbon development placed only in the area that is between 15 m and 25 m above sea level. Definition of the built areas and an urban structure for the whole area is missing. The block structure shown in the partial plans is clear but not very convincing. The development and the streets do not follow the topography.

National and regional connections are organised with the metro line from Helsinki to Söderkulla. An efficient bus loop system serves internal transport. There is a comprehensive network of foot and bicycle paths.

The town model is based on long stripes of zig-zag shaped buildings following the contour lines in the forest hills located on both sides of the river valley. The development connects the Sipoonkorpi protected natural area to the archipelago. This long axis forms the physical and mental backbone of the plan, reflected also in the stripes of both built areas and natural areas in-between. The river and the valley zone are used as a single dominating landscape element, while the townscape is divided into a number of long urban stripes following the contours of the hills and the valley. The division into both long stripes and polycentric sub-centres within the stripes is a bit confusing. The hierarchy is not clear and does not support directly the arrangement of services. Any part of the long stripes can be the platform for the services. As a consequence, the service structure may be very scattered and individual services do not support each other. The economy of scale suffers, accessibility decreases and transport demand grows. Terraced urban forms against the contour lines are apparently avoided, but they could bring in the missing gravity points near the geographical centre and offer natural locations for services.

The proposal includes different population scenarios up to 100 000 inhabitants with different density options (floor area ratio FAR from 0.2 to 0.9) resulting in different construction land demand (from 25% to 75% of the planning area). However, in the land use plan the suggested maximum density is FAR = 0.6 without the green belts in-between, which is sufficient for an eco-efficient urban form. Energy systems include solar panels on the roofs, heat pumps and passive house standards. Parking is located either underground or in the basements, which is expensive, but saves urban land and promotes walking and cycling.

The urban form following the contour lines is easy to walk and cycle. However, as in all linear development models, the average distances tend to grow, thereby increasing transport costs and fuel consumption. Part of this may be compensated for by making the pedestrian and cycling routes so attractive and safe that the modal split can be turned towards un-motorised traffic. Regardless the linear form increases the distances to the metro line requiring extra feeder bus lines to the metro stations. The rocky hillsides will cause extra costs for foundations which increases energy consumption and carbon emissions in the construction phase.

The long green corridors support the local existing water systems, rainwater infiltration and harvesting. The construction very close to the river banks requires special attention to be paid to flood protection. Wooden structures and renewable building materials are suggested in all buildings whenever possible. A knowledge centre for timber construction is located in the area.

Environmental and landscape themes are considered superficially without details and they are difficult to assess. From among the ecosystem services rainwater management is mentioned.

The proposal places a strong emphasis on the participatory process. There is interplay between nature and development based on geomorphology. The urban nature concept includes an attractive network of light traffic routes. The author suggests unique standards for each place leading to unique architecture.

The proposal does not succeed in delivering a novel model for unique services and employment.

Proposal No 30
Saa peittää / Islands in the Stream

Unified, new towns

The entry has a clear urban structure with a chain of cells but the development fills almost all the area. The urban structure in the city core is rather monotonous, but variable blocks typologies are introduced on a diagrammatic level. The displayed cityscape is not convincing. The themes of transportation and the cycles of nature are well presented, especially in the transport plan. The bridge over Sipoonlahti bay is quite long, thereby adding to the costs.

The author has studied eco-efficiency carefully and introduces the "Eco-Cycle Model", a tool for an integrated holistic approach to long-term sustainability. The model seems usable in many possible development scenarios.

The Helsinki to St Petersburg railway via the airport, the train from Helsinki to Porvoo, the metro / commuter train from Helsinki to Söderkulla and boat lines provide the national and regional connections. Internal transport is arranged via buses and, in the future, trams. Motorway and railways are covered in the eastern part of Sibbesborg.

The proposal covers the whole area with new development. The five satellites are separated by varying types of green zones. The distances between the urban units are longer than necessary, which increases the transportation network and travelling distances. The traditional grid structure is reformatted to follow the landscape and contour lines. There are three different density classes, all including urban farming spaces. Urban typologies are well developed and very usable to construct a variety of townscapes.

The proposal is based on an "Eco-Cycle Model", which covers well all the main issues of ecological urban planning. The connection from the theoretical principles of the model to the land use pattern and urban forms remains unclear. Carbon dioxide reduction by 70% is part of the targets. Pedestrian traffic and cycling are mainly promoted by the size of the urban unit regulating the maximum distance to the centre. Water systems, waste management and urban farming are part of the "Eco-cycle model", and urban gardening is proposed in the area. However, reference to building materials and recycled materials in construction is missing.

The environment and landscape theme is comprehensively addressed. The submission includes fairly large green spaces in the surroundings of the urban core. Areas will be reserved for agriculture, recreational activities and formal parks, so a green infrastructure will be formed. At the city core there will be a large, built "serpentine park" that uses existing topography and extends over the motorway and proposed railway. Assessment of the plan shows that the urban fabric covers most of the area but larger green spaces remain on the fringes. However, connections between the green spaces are fairly narrow especially in the east-west direction. The shoreline of the fjord remains largely undeveloped forming a green 'backbone' for the Sibbesborg area. Different identities in terms of the environment and landscape are planned for the east and west sides of the area divided by the fjord. The submission presents a comprehensive "Eco-Cycle Model" which is intended to minimise the negative environmental impact of human activities on the ecological features of Sibbesborg. The model is presented in detail and provides a holistic and integrated approach to the management of energy, water and waste to achieve long-term sustainability.

The "Eco-Cycle Model" is linked to ecosystem services but the concept is not explicitly discussed. Issues such as urban gardening and stormwater management are positive aspects.

A sense of community is supported with local workplaces. There are intentions to use high-quality materials, to bring nature to every doorstep and to provide the apartment buildings with single-house qualities. The aim is to guarantee the village-like atmosphere of the eastern side of the bay.

The proposal has some nice embedded potential of unique services and employment development, such as a larger regional perspective and a compact core for services. However, the model presents a relatively traditional urban structure, which might not express local social acceptance. The overall description of the dynamics of the solution for unique services and employment is missing.

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Lower middle category

Proposal No 4 – Letters from Sibbesborg

Scattered structures, based on place-based development

A not very realistic entry based on supposedly idyllic villages. More careful examination shows that to fit the target population in the area it has to be urbanised quite heavily. If the "village" floor area ratio (FAR) is 1, the image is not that of an idyllic low-rise, but rather is quite urban and high density. With this estimated 10 ha / village, green spaces between them are quite narrow.

The built volume is not shown in the drawings, which are rather hard to comprehend. The areal section is promising but there is only a small-scale customary rural townscape in other illustrations. The focus of the entry is on local food production.

National and regional connections are delivered via the metro from Helsinki, the high-speed railway line to St Petersburg via the airport and a railway from Nikkilä. Internal transport with trams running in several circular loops around Sibbesborg is very theoretical. New bridges block Sipoonlahti for sailing boat traffic.

A fully dispersed village system with an extremely low overall density. As a consequence, the green areas are quite scattered. The real urban form is impossible to assess due to a lack of plans. However, the presented principles create really extensive networks and long internal distances that produce an inefficient and energy-consuming urban form. The new urban villages are actually a type of modern farmhouse collective arranged around a common yard, small urban cells scattered in the landscape. The suggested "district heating and cooling" as well as "proximity to services" seem totally unrealistic in this kind of urban form. The proposal shows a collection of all kinds of sustainability catchwords that do not fit together.

The "sustainability goals" include "reduced automobile dependency" and "compact development", but the principle is not reflected in the urban plan; on the contrary, it is quite the opposite. The concept promotes car traffic and energy transportation and increases the carbon footprint. The power plant is located close to the eastern border far from heat consumers. Wind turbines in the central area are marked with a symbol without specific information or a plan. Solar panels are suggested for only some public buildings. Storm water systems and waste water treatment facilities are suggested.

The environment and landscape theme is difficult to assess through the narrative form description. The author presumes that local food production would satisfy the entire food requirements, which is not fully plausible. There are viable ideas of an environmental map and green roofs. An interesting but maybe not entirely realistic idea based on a green and slow city. Ecosystem services are not mentioned explicitly.

The creation of the sense of community is an essential and strong part of the proposal. The aesthetics of the environment are based on the traditional village architecture. There is a holistic idea of human health and the health-promoting physical, social and cultural environment. The entry is deeply rooted in the Finnish, and maybe also the local cultural, context.

This eco-idealist work can be interpreted as taking a high but well-founded risk in creating unique employment and services for the regions. The ideas of de-industrialisation, space for complexity, and community housing could be a lucrative option for a very specific segment of consumers in the metropolitan region. The idea of services, livelihood and businesses built around the use of horses would fit especially well in the context of Sibbesborg.

Proposal No 5 Green Bacon

(non-classified in terms of principal urban structure solution)

The entry has some good analysis but the overall plan is a non-innovative solution sprawling across the whole area. The development fills rather a large area, producing insufficient accessibility. The cityscape is not on display, only the quite chaotic centre, with development that is, at least partly, too dense.

National and regional connections are organised via the Helsinki–Porvoo–St Petersburg railway and a metro line. The use of the metro and the suggested light rail to Sibbesborg, requires also an additional change when going towards eastern Helsinki. Local transport is organised in the first phase by increasing the network of low-emission buses and later by expanding light rail connections and with personal rapid transit (PRT). In many locations, utilising PRT is not feasible as the distance to the city centre is too great. The bridge over Sipoonlahti closes the bay to bigger sailing boats.

The proposal is based on a principle where most of the land area is reserved for developments separated by green corridors. Blocks of flats are scattered quite irregularly in the forest areas and along contour lines. The entry is missing the efficiency ratios and other numbers. The energy system, with offshore wind turbines and an internal DC electricity smart grid network, forms a combined energy and information network. By 2020 all building permits in Sibbesborg will require zero-carbon buildings. Public buildings are built incorporating symbiotic functions, so that they profit from each other. The swimming hall, food markets and IT server centres require cooling and the excess heat is directed to be used in a swimming pool in the same block to heat the water in the pools.

A bullet train for St Petersburg leaving four times a day is not a credible idea for several decades to come. Energy systems include all current and novel technologies (solar heat and power, fuel cells, hydrogen cars, offshore wind power, hydrogen, heat and electricity storages), which seems unrealistic.

Grey and black waters are separated in every building through heat recovery systems. These waters are cleaned and recycled. Recycling waste is mandatory. Commonly available composts produce fertile soil for gardening and strip cultivation. Construction waste is recycled.

The environment and landscape theme is considered in the description but not particularly innovatively. There are green connections in built-up areas and green fingers from north to south but not from east to west. Ecosystem services are not discussed as such.

The sense of community is well enhanced through local services. The entry proposes wiki-planning and tradition respecting. Physical activity, also tourism, has a central role. There is an attempt to take the local existing culture and Finnish wooden building tradition seriously.

The clear vision and understanding of zones with different qualities offer a platform for starting to develop uniqueness in services. However, the current idea that sustainability services are unique is not enough since it is a compulsory part of the competition. The idea of developing a harbour for "hotel boats" that stop at Sibbesborg may not be realistic but opens an important discussion on possible tourist attractions.

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Proposal No 6
Town in Forest

(non-classified in terms of principal urban structure solution)

The entry is based on a very tight co-ordinate system for the development which is not adjusted to the topography. The overall cityscape is hard to perceive. The architecture on display is rather futuristic.

National and regional connections are organised via a railway from Helsinki to Porvoo and a metro line. There are also biogas buses to Talma and Nikkilä and the suggestion of a cable liner shuttle.

The proposal shows a rather formalistic urban form with large arcs of transportation networks and light tramlines. It is based on traditional rectangular grids which are rather efficient for urban functions. However, the rail tracks are somewhat distant from most of the population and job locations. The most efficient building blocks (7-9 storeys) are located close to major transit lines and as infill development, which on closer investigation may become unrealistic. The proposal suggests new university and medical research centres as well as tourist and cultural attractions in the area. The special architectonic ”towers” create the image of the area, although with neither functional nor eco-efficiency justifications.

The energy system is based on electricity (wind and solar power) and biogas without any specific grounding. Shorelines and forest areas are left mostly undeveloped, which supports sustainable water systems and flood management. The diagram on energy and material flows is comprehensive and relatively complete but is not reflected correspondingly in the town plan.

The environment and landscape are considered in general terms. Large nature areas in the south-west and south-east remain undeveloped. The ecology is emphasised and discussed but in a manifesto style; it is not clear how the principles are put into practice. Ecosystem services not mentioned explicitly except for small-scale farming.

The author intends to promote the sense of community but gives no actual tools for that. The roads and towers might create a very brutal environment.

The proposal does not have any clear value proposition to offer for unique employment and services. The clear vision of the size (in numbers) of the development offers a good platform for starting the service and employment brainstorming work.

Proposal No 12
Selvedge

Very dense and compact structure

A rigid, aggressive urban structure with random placement. The development does not follow the topography. The buildings on display are monotonous and over-sized.

There is only the Helsinki- Porvoo-St Petersburg railway serving national and regional connections. In addition a winter shipping line connects the area with Helsinki. Internal transport is arranged with an efficient two-line light rail network running north–south and east-west. Compact urban development builds up good grounds for light traffic. The motorway and railway are placed in a tunnel beneath Green Bay. This forms a wide area protected from noise but is very expensive and extremely difficult to finance. However, this central site is suitable for high-density development.

There are two efficient centres with additional linear and rectangular sprawl development without much recognition of the natural conditions nearby. Nature areas are, however, mostly preserved. The motorway in a long tunnel requires much expensive excavation work and energy consumption. The traditional streets and blocks form a rectangular grid and streetscape.

High-density development creates a lower carbon footprint than normal development. Smart metering enables control over energy usage and personal Green Reward and Energy Account portfolios promote energy-efficient and low-carbon behaviour. Wood construction is promoted. The seaside areas are preserved, which is favourable for flood management.

Consideration is given to the landscape and environment theme, with the aim of protecting existing ecological values through dense urban settlement which leaves large natural areas intact. The author establishes SEI (Sipoo Environmental Institute) to deal with ecological and social services. The entry focuses on sustainable transport and includes ecological land bridges across major roads. Ecosystem services are mentioned.

The proposal deals very little with ways of living and lifestyles. There are some social innovations and also a clichéd mention of nature being a healing factor. Another University of Technology in the region is a very unrealistic idea.

The proposal does not succeed in presenting a clear vision for unique services and employment. However, some very interesting themes, that could support the vision, can be gathered from the proposal. The proposal builds interestingly on the famous Finnish education system, which resonates nicely with both idealism and practice. The idea of a satellite campus, online CAD-based manufacturing and especially the carbon-capturing ”timber hill town overlooking the Sipoonlahti fjord and surrounding agricultural valleys” is definitely something valuable to study in more detail in further development of the area.

Proposal No 13
JG01

(non-classified in terms of principal urban structure solution)

The development with unstructured sprawl fills the whole area. A formalistic urban structure in the centres is based on circular and curved lines.

National and regional connections are organised via a railway and a metro line. The new main road over Sipoonlahti would be a source of noise.

The whole competition area is used for new “polycentric” development. The total floor area and population are not given. The blocks have a formalistic layout. New buildings have been built on top of old ones, which would not be necessary because of the amount of vacant and available land. The author suggests the use of renewable energy sources, but fails to show it in the land use or urban form solutions. The proposal shows a kind of avant-garde intelligent green building concept integrating energy production, water treatment systems and green facades. This is innovative but so far unrealistic before new and low-cost technologies reach the market.

The heavy and extensive infrastructure (train, metro and boat transport, water supply, sewage and drainage networks) increases the initial carbon footprint to a very high level even during the first stage. A double circle internal metro line is unrealistic for this size of a town. It is expensive and carbon intensive in the construction phase and cannot be compensated for with low-carbon traffic behaviour in the operation phase. Ecological corridors are presented in a formalistic way without specified connections to topography or water systems.

The ideas that consider the environment and landscape are rather vaguely presented and it is hard to see how they are to be put into practice. Ecological corridors will remain but are rather narrow. Ecosystem services are not mentioned and it is not clear if this aspect is considered.

This proposal says virtually nothing about living and lifestyles.

The unique service and employment vision of the proposal is not documented well enough to allow proper assessment. However, here again some interesting suggestions are made, such as wood construction, and renewable energy devices, but, on the contrary, the vision of “ring III as new housing areas” does not support the uniqueness of the development.

4 Evaluation Of The Competition Entries

Proposal No 20
Daniel's Dream

(non-classified in terms of principal urban structure solution)

The overall plan has no clear structure for the whole area and the confusing presentation makes it difficult to perceive the entity. The urban structure on display is partly interesting but has also rather disturbing qualities.

There is a metro line with only one station. An additional station on the west side would improve the level of public transportation and would allow new urban development. The city centre is located on a motorway cover in the middle of the competition area. The Uusi Porvoontie road will be developed into a more urban boulevard. New bridges block Sipoonlahti for sailing boat traffic. Environmentally friendly ways of travel, such as carpooling, car sharing and on-call public traffic solutions, are introduced.

The town model is based on small cells built quite close to each other, thus forming almost an urban continuum. The 3D presentation from different angles emphasises this structure. The overall layout is rather schematic and superficially articulated. The presentation follows the same pattern: urban form solutions such as block shapes and a street network are weakly based on local geographic, topographic or other natural conditions. River banks are constructed creating a need for extra flood prevention measures. Floating houses have been set in the river. A major proportion of the population of 50 000 inhabitants is devoted to medium-density development. The areal density lies close to the minimum level for an eco-efficient urban form.

The green deck over the motorway is a double-edged sword: it promotes walking and cycling, but as a very heavy piece of infrastructure it consumes a lot of materials and energy during the investment phase. This is also the case for the three new bridges over the Sipoonjoki river. The smart internal public transport system increases the low-carbon development. Some issues are mentioned in the text (preservation of the river valley, sea and shoreline utilisation for recreational purposes, rainwater utilised for plantation, waste water treatment in a regional plant) but they are not reflected in the required land use plan. There is no attention to materials use or recycling.

Environment and landscape are considered in rather traditional ways –mainly through ideas concerning green and ecological corridors. Ecosystem services are not explicitly treated.

The author suggests active mobility for everybody, even children. The proposed maximum distance of 1000 m to public transport is no longer walkable. There are some efforts to connect the plan to the ancient history of Sibbesborg.

The proposal has some very interesting ideas for developing unique services and employment for the area, such as a new community centre on top of the motorway, floating villas, a city lab and wider region connectivity. However, the presentation fails to explain the drivers for the unique vision.

Proposal No 21
Seeds for Growth

Scattered structures, based on place-based development

The entry has a scattered and broken urban structure. The overall plan is difficult to comprehend. The partial plans show a sparse and loose structure and some oversized buildings.

National and regional connections are organised via a railway from Helsinki to Porvoo. The implementation of the railway is very unclear and stretches very far into the future. For internal transport there are efficient public transportation systems: microbuses and a circular city tramline. Light traffic has been encouraged by bicycle service points and a national rowing track.

The proposal starts with infill development and continues with the new development. The central development area is freely formed without clear or strict ideas of blocks and streets. The Sipoonjoki valley is preserved as a large green belt. The urban form seems quite low density, and the minimum level results in only a maximum of 30 000 new inhabitants, which is not enough to support the planned services and infrastructure. The campus area increases the variety of the population. The wind farm mentioned in the text, located ”possibly at the sea”, as well as solar power and wind turbines in public buildings do not offer a sufficient energy plan for the community.

The proposal insists on greater density as a necessary base for eco-efficient development. However, it fails to present actual plans and numbers to verify this endeavour. In fact, the total limit of inhabitants is set at 40 000 people. A city-supported share-drive system is broadly described and it can increase the low-carbon transport modes, but should be complemented with many other transport systems.

Rainwater and snow meltwater are recycled and returned to the ecosystem. Waste water is treated and utilised in a regional biogas plant. Waste is recycled for bioenergy production.

The environment and landscape are considered in rather traditional and cursory ways. There are ideas for a “wild promenade” on the river and fjord, paths to connect housing areas to the promenade, clusters of houses with a common green space and an incubator campus.

Much of the green areas on the coast will be built upon. Ecosystem services are not explicitly treated.

A sense of community is supported with design solutions such as a common semi-public space opening from each house. There are some ideas about how to nurture the oldest inhabitants with accessory apartments. The author suggests a new, more sustainable transport system that in the beginning relies heavily on carpooling.

The proposal builds heavily on the new campus idea for the unique services and employment theme. However, it is not clear how a new campus can be lured to the region. In addition, in this proposal the campus is located quite separate from the inhabitants of the area, which does not support chance encounters, one of the key drivers for innovation.

4 Evaluation Of The Competition Entries

Proposal No 22
Easy Living

Circular chain of villages

The entry has a rather clear overall plan with several centres. The rigid and formalistic urban structure is based on circular lines. The development does not follow the topography, but there are good-scale terraced solutions in some sections.

National and regional connections are organised via the Helsinki–Porvoo–St Petersburg railway and a metro line, which is an expensive proposition due to the many stations and an underground building. The metro also serves local traffic together with electric or gas buses. All five metro stations have places for bicycles and park-and-ride facilities. There is a marina near the motorway bridge. In the shopping centre all parking places are underground.

The competition area is divided by the transport corridor and the Sipoonjoki valley basically into four quarters. All of them have the role of a separate urban unit. The fifth one is located in the section of the two eastern units utilising the motorway and railroad lines. The new metro line is planned to unite the urban units and cross the other transport lines in the new centre (”downtown”) of the community. The units are separated by varying types of green zones, two of them being the Sipoonjoki valley and the transport corridor (motorway and anticipated railroad). The population varies between 11 000 and 19 000 inhabitants per unit. It is not certain whether all five units will have sufficient people to support all the services required. The overall density is rather low to reach the required eco-efficiency.

The urban units, as well as the blocks and parks, follow circle shapes based probably on the defined distance limit from the centre. The shapes might seem too formalistic, but could be easily reformatted to more closely follow the actual local conditions. Section drawings are relevant to understand the terraced houses idea. Green fingers are planned to reach the inner areas of the circle blocks. A third of the electricity is produced by solar panels on roofs and noise walls of the motorway and railroad lines.

The transport system is functional and supports walking and cycling, especially in the ”downtown” unit and by the Grand Esplanade. However, including an underground metro system, it may become too heavy and expensive an investment for such a small community, which implies rather low eco-efficiency in the life-cycle approach.

The river mouth is reconstructed to provide agri- and aquaculture production. The green roofs are utilised for rainwater harvesting and cooling. Waterfronts, lakes and river valley and forests are open to all. Local agriculture and aquaculture, including fish cultivation, support local material flows. Wood is promoted as a local building material.

The environment and landscape are considered in rather a traditional and cursory manner, and not particularly innovatively. There are mentions of green roofs and run-off waters. The author suggests an innovation for cooling buildings during summertime using blocks of ice hoisted from the sea in winter and stored in rock caves. Only small-scale gardening is mentioned among the ecosystem services.

The proposed aesthetics and the identity of the environment are not very convincing.

The proposal has not been able to show how unique services and employment can be created in the area. The core of vitality, ”Sibbesborg University shall be in the heart of the city”, is a nice idea but is not founded on local characteristics. The downtown location as such offers an agreeable starting point for good traditional business development.

Proposal No 23
AQ7FA17

(non-classified in terms of principal urban structure solution)

An attractive collaboration of nature and the built environment, with the overall plan being extremely hard to perceive. The partial plan is very sketch-like, with no convincing urban structure or cityscape.

Subway lines and a light rail link connect Sibbesborg to Porvoo, Helsinki and Nikkilä. The link between transportation and land use is unclear.

Dense riverside blocks are situated mainly on the southern side of the motorway. Long north-south oriented blocks follow the Sipoonjoki river direction on both sides of the river valley. River banks are developed very close to the shoreline, and include hotels and restaurants. The proposal is presented on a very general level only, without detailed drawings or examples of the urban form design solutions. The land area is used quite efficiently. However, the linear shape of the development might increase the total length of the infrastructure if not very carefully designed. The proposal uses a unique mathematical theory of reformatted lattices as a base for urban design. The benefits of the theory remain vague.

Water systems in general are analysed in the text but the results are very difficult to ascertain in the proposed plan. The construction of the river banks requires flood protection measures, which are not included in the proposal. Each house has a garden for growing vegetables. Local building materials are not promoted. There are small wind parks in the shoreline areas and probably also offshore.

It is not evident how the environment and the landscape will be considered. The sensitive landscape of the fjord is heavily built upon. Ecosystem services are not mentioned.

This proposal does not consider living and lifestyles.

The proposal has not being able to transform the ideas of unique services and employment into an easy to understand form. However, it has some bold ideas that could be interpreted as a good starting point for luxurious development, such as a bold harbour gate with premium sites. Nevertheless, the overall plan for uniqueness is still missing.

Proposal No 26
Vesi / Heart and Soul

Scattered structures, based on place-based development

The entry introduces an interesting relationship between the built and unbuilt environment. However, the overall plan is strange, with a small amount of development and a large empty area in the middle. The partial plan shows an interesting urban structure. The presentation is personal and atmospheric.

National and regional connections are via the Helsinki–Porvoo–St Petersburg railway. Internal transport arrangements and assessment of the impact of traffic arrangements on the surroundings are inadequate.

The proposal relies more on nice-looking images than on realistic town plans. It seems to emphasise above all the water issues as well as the topography of the area, especially Sipoonjoki valley. The central areas display a traditional European small town structure and picturesque streetscapes. The rest of the new development is scattered along very long rows of houses on top of the forest hills on the western side of the valley. Without any detailed information, the overall urban form seems rather loose and inefficient. River banks and seaside areas are utilised in the later phases for new development close to the mouth of the river. Bridges and riverside fields complete the picture to be viewed from the long residential buildings following the river terraces. The energy system includes geothermal energy and wind power on the hills (only described in the text, not in the land use plan or urban form descriptions). The development starts from the twin islands of Sibbesborg and Joensuu and continues to the outer rings and along transport routes quite logically and eco-efficiently.

The compact urban form in the central areas promotes in principle low-carbon transport modes (walking, cycling, public transport). However, the lack of detailed information and concrete town plan concepts covering the whole new town prevent further assessment. The author suggests new wooden loft buildings in the centre resembling old warehouses in Porvoo and Bergen. The buildings on the hilltops are also wooden. Recycling issues are not recognised.

The environment and landscape are considered; there are rather good ideas but few details. Lots of green space has been preserved thanks to the compact hous-

4 Evaluation Of The Competition Entries

ing area. Ecosystem services are dealt with to a certain extent; there are ideas considering storm water retention and wetlands to clean farmland water.

There is a contradiction between the proposed development and the population target of 70 000 inhabitants. An experientially strong entry. There is a clear architectural vision, with Norwegian-style wooden lofts and good opportunities for physical activity. Historic buildings are highlighted.

The proposal provides some interesting ideas about unique services and employment, such as the King's Road, a market for the neighbouring farms, a creamery for milk, yoghurt and cheese, etc. However, the overall description of the dynamics of the region is missing. The potential of the highway is not utilised in the proposal.

Proposal No 28
350160

Scattered structures,
based on place-based development

An entry with a scattered overall plan. The partial plans show a formalistic urban structure.

National and regional connections are via the railway from Helsinki to Porvoo, with a connection to the metro in Sakarinmäki. An electric bus network provides the internal transport.

A satellite model for five new neighbourhoods, starts from the northern and eastern parts and ends in the last phase in the western parts. The presentation includes a detailed table of exact numbers for population, buildings and densities in the different sub-areas. The size of the units varies between 5 000 and 7 000 inhabitants, each having a maximum distance to services of 650 m. Rather low-density development consumes a lot of the land and leaves the natural areas mostly scattered. Off-grid energy systems (solar, wind, fuel cells, etc.) are recommended only if they are economically feasible, which is probably realistic, but is not a particularly low-carbon approach. Heat pumps and renewable fuels such as wood are recommended.

The transportation system is based on four circle-type electric bus routes. An electric urban train is located in "overground tunnels", thus not disturbing the environment. The motorised transport system is rather heavy and expensive - probably also unrealistic, which leads to increased car dependency. Walking and cycling are promoted mainly by the size of the urban units. The existing water systems are preserved. The river banks and the valley are preserved as natural areas.

Wood and other biofuels are recommended for energy production. Local wood and stone are recommended as building materials. There is 100% waste water recycling and utilisation in green area cultivation. Waste management and recycling are not mentioned.

The environment and landscape are considered, but not in particularly innovative ways and with a rather superficial description. There are large green areas along the fjord and green corridors. Storm water management is mentioned with regard to the ecosystem services.

The proposal includes ideas on living and lifestyles such as reducing social boundaries and peaceful living but no explanation as to how they are put into practice.

The proposal has a limited amount of data to support the thinking behind unique services and employment.

Proposal No 29
Archipelago 2357

Scattered structures,
based on place-based development

An entry with a scattered urban structure and with a formalistic but partly interesting urban structure in the partial plans. There are some pictures showing interesting cityscapes. It is difficult to compare this to the other proposals due to the incorrect scale of the drawings.

National and regional connections are via the Heli railway from Helsinki to Porvoo, with railway stations anchoring the town centres and the metro from Helsinki to Söderkulla. Local bus routes serve the internal transport needs.

The entry consists of about 30 compact circle-shaped villages or "urban islands". Water systems and green corridors delimit the possible building areas, from where the suggested urban islands are selected. The distances between the urban units are longer than necessary, which increases the transportation network and travelling distances. Only in the theoretically extreme case of totally self-sufficient villages would there not be traffic between the villages. There are no convincing arguments for the long and curving house types and blocks except maybe the aesthetics from a bird's eye view. The positive side of the compact urban form is that it conserves land area and leaves greater unified green areas. The compact size and shape of the urban units promote walking and cycling.

The natural conditions in the area are well analysed. Lowland areas are not built upon and they continue to act as part of the important water systems. The ecological corridor of the Sipoonjoki river and valley is also preserved. The rest of the green belts are also important for the existing water systems and catchment areas as a whole. Storm water management is well analysed and taken into account. Building materials, recycling and waste issues are not mentioned.

There is rather a comprehensive treatment of the environment and landscape. The approach is based on preserving existing natural values, building on high ground and considering the hydrology. There in an attempt to integrate urban green and natural green areas but it is not quite clear how this is achieved. The ecosystem services management is elaborated on to some degree.

This proposal says virtually nothing about living and lifestyles.

The proposal has a limited amount of data to support the thinking behind unique services and employment.

4 Evaluation Of The Competition Entries

Lower category

Proposal No 17
Loops

(non-classified in terms of principal urban structure solution)

An outrageous overall plan based on motorway circles surrounding the developments. The urban structure for the whole area is missing. However, the centre is rather interesting.

National and regional connections are via the metro. The street network incorporating loops is very theoretical. The loops have a negative impact on the environment and the number of roads wastes resources.

The proposal uses circle loops as the basic shape for the urban form and street network. The focus of the proposal is totally on the transport sector. The solution multiples the needed external infrastructure and seems to be only formalistic. Actually, the extremely large infrastructure investments waste both material and energy resources, both in the construction and the operation phases. The total transportation mileage is maybe doubled as well. The proposal claims to control urban sprawl but in fact it does the opposite. High-rise housing areas are located in the fringe area and not in the middle, which also increases the traffic demand. Energy issues are totally neglected.

The tramlines follow the circle system of the loops, which means longer distances to the stops. This endangers the popularity of the tram service, which may in turn be uneconomical and unfeasible even in the initial phase. People choose to use private cars instead, which is far from eco-efficient.

Ecological water resources management is mostly missing. The Sipoonjoki river banks are mainly preserved, thus at least partly supporting the local water system. Eco-efficient recycling of materials and waste management are not mentioned.

Environmental aspects are difficult to comprehend and there are no great innovations. A green network is briefly presented but the fjord will be heavily built upon. Ecosystem services are not mentioned explicitly.

A futuristic plan might look good from a bird's eye view, but the solution does not support living and lifestyles.

The proposal does not present a vision for assessing the uniqueness of services and employment. In addition, the "loops" seem to be too dense and signify more of a closed society instead of an open one in the plans.

Proposal No 25
Bosatt

(non-classified in terms of principal urban structure solution)

The overall plan consists of a random scattered structure. The unity is hard to perceive because of the barely sufficient material.

National and regional connections are via the Helsinki–Porvoo–St Petersburg railway and a rapid tram from Helsinki to Söderkulla. Internal transport arrangements and the impact of traffic arrangements on the surroundings are inadequate.

Eriksnäs located in the far eastern corner is chosen as the starting area, which creates long transportation networks and distances. Long rail tunnels and a rapid tram all the way to Helsinki seem quite expensive, energy consuming and unrealistic.

Wood and other biofuels are recommended for energy production. Local wood and stone are recommended as building materials. There is 100% waste water recycling and utilisation in green area cultivation. Waste management and recycling are not mentioned. Most of the current water systems can be preserved because a lot of the green areas are scattered within the built areas. There is a local food industry in the northern part of the area.

The proposal does not have enough information to allow assessment of the environment and landscape, living and lifestyles, or services and employment

Winter scene

Lakeside view

Snow-covered hillside in Eriksnäs

5 RESULT OF THE COMPETITION

5 Result Of The Competition - 1St Prize €50,000

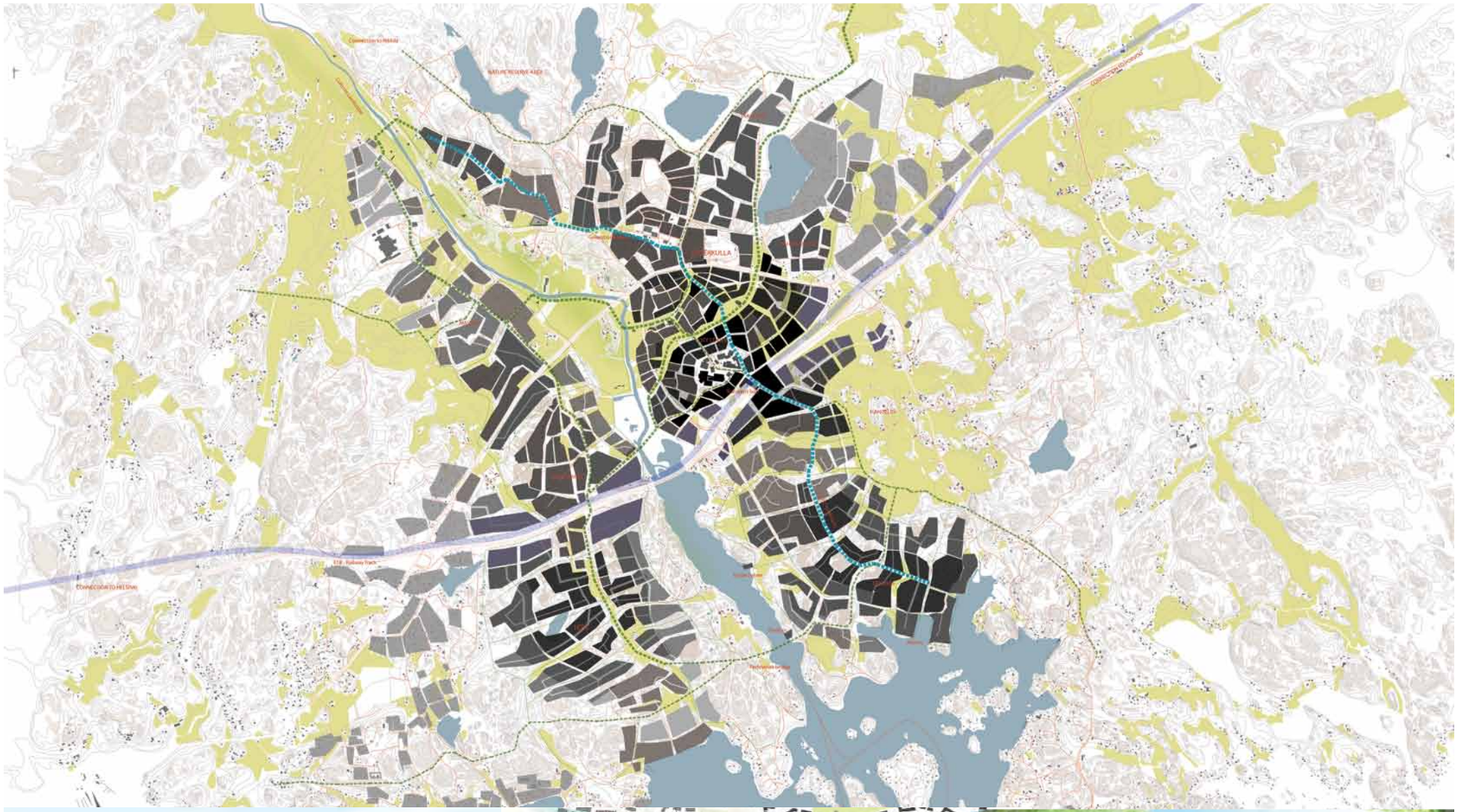
The competition received 30 entries, of which one was disqualified because it was presented in the Finnish language only.

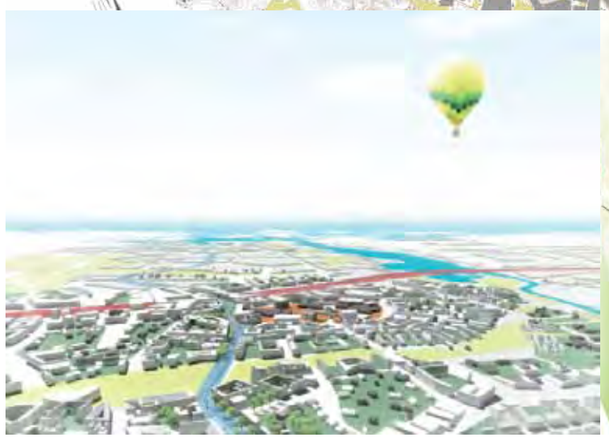
The jury decided to distribute the prize money as stated in the competition programme. The award category was formed via long discussions by jury members and consists of the following prizes:

1ST PRIZE €50,000
The jury decided to grant first prize to the submission 'Nourish!'.

'Nourish' outlines a vision for a dynamic new town and sustainable community that builds on the local values and strengths, reaching to an internationally interesting statement of planning for sustainability. The proposal shows good understanding of the regional scale, provides a sound and workable solution for the competition area and suggests a rich variety of extremely good local spatial, programmatic and typological ideas. The final outcome is a compact, integrated and mixed development with short distances. In the twin centre, the proposal outlines the most innovative urban structure of the competition. Sibbesborg centre is located in a natural place near the existing Söderkulla housing with well-developed connection to the unique landscape of Sipoonjoki river and fjord. Linear developments extending North and South from the centre are optimal in terms of public transport, eco-efficiency and natural preservation, providing promising setting for urban social life and economy. The connection between city and nature is re-thought with highly valuable new tools to manage open green space as part of urban realm and sustain the boundary between built and non-built.

5 Result Of The Competition - 2Nd Prize €40,000

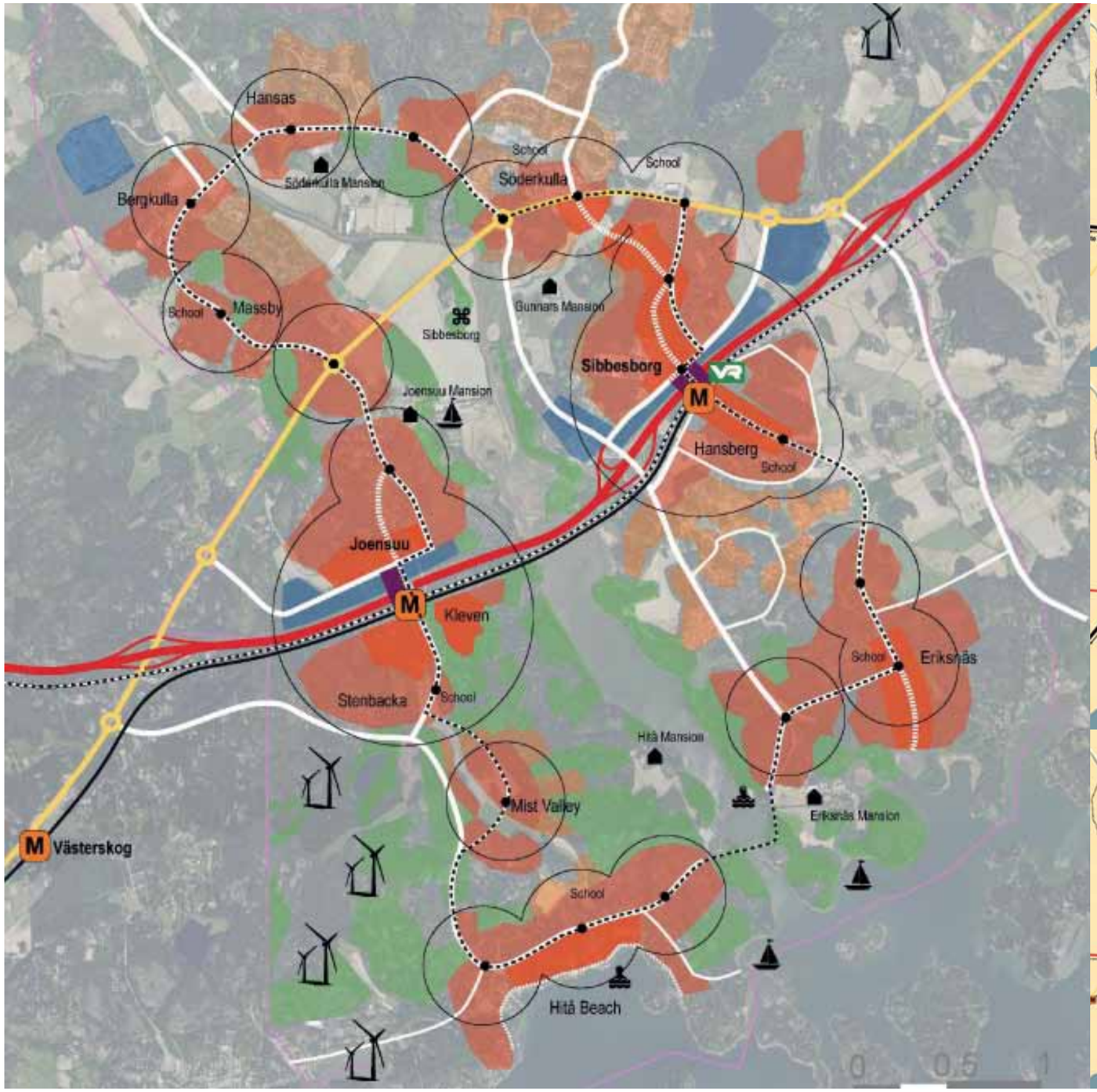


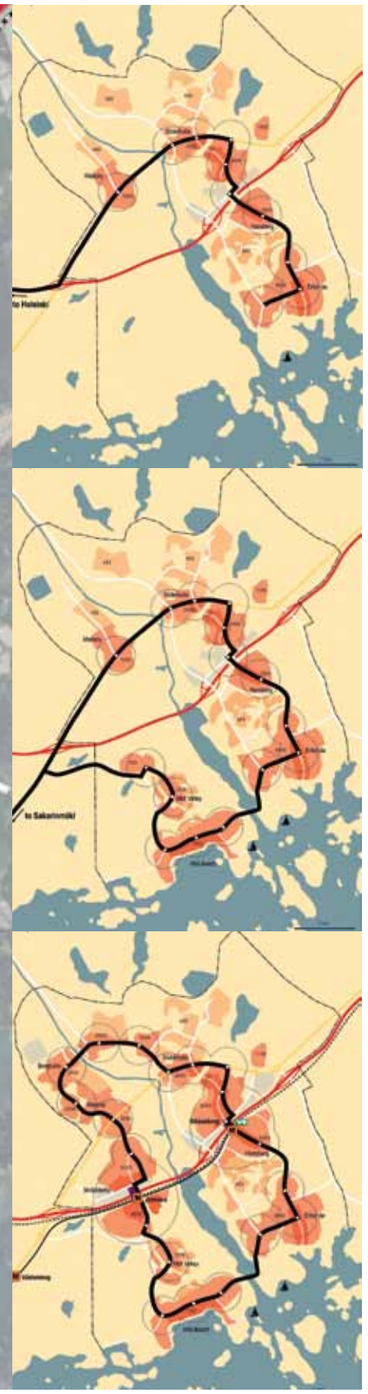


2ND PRIZE €40,000
The jury decided to grant second prize to the submission ‘Balance’.

’’Balance’ has a well-argued strategy from regional scale to local urban design, taking good care of links to other parts of Sipoo. It combines a careful analysis of the topography and natural landscape to a robust and adaptable urban network. The proposal saves most valuable landscapes, while providing very good access to nature for all building lots. Various landscape features add value to the multiple local parks and green corridors. While the overall density is relatively low, and thus non-optimal in terms of eco-efficiency, other themes of uniqueness are well-addressed. The centre is extremely well positioned and developed, taking cleverly into account the vicinity of the motorway, re-use of old logistics buildings, accessibility by rail, existing settlements and cultural landscape of Sipoo river valley. Its rich urban structure is among the best in the competition: variable blocks enable mixing different building types and typologies.

5 Result Of The Competition - 3Rd Prize €35,000



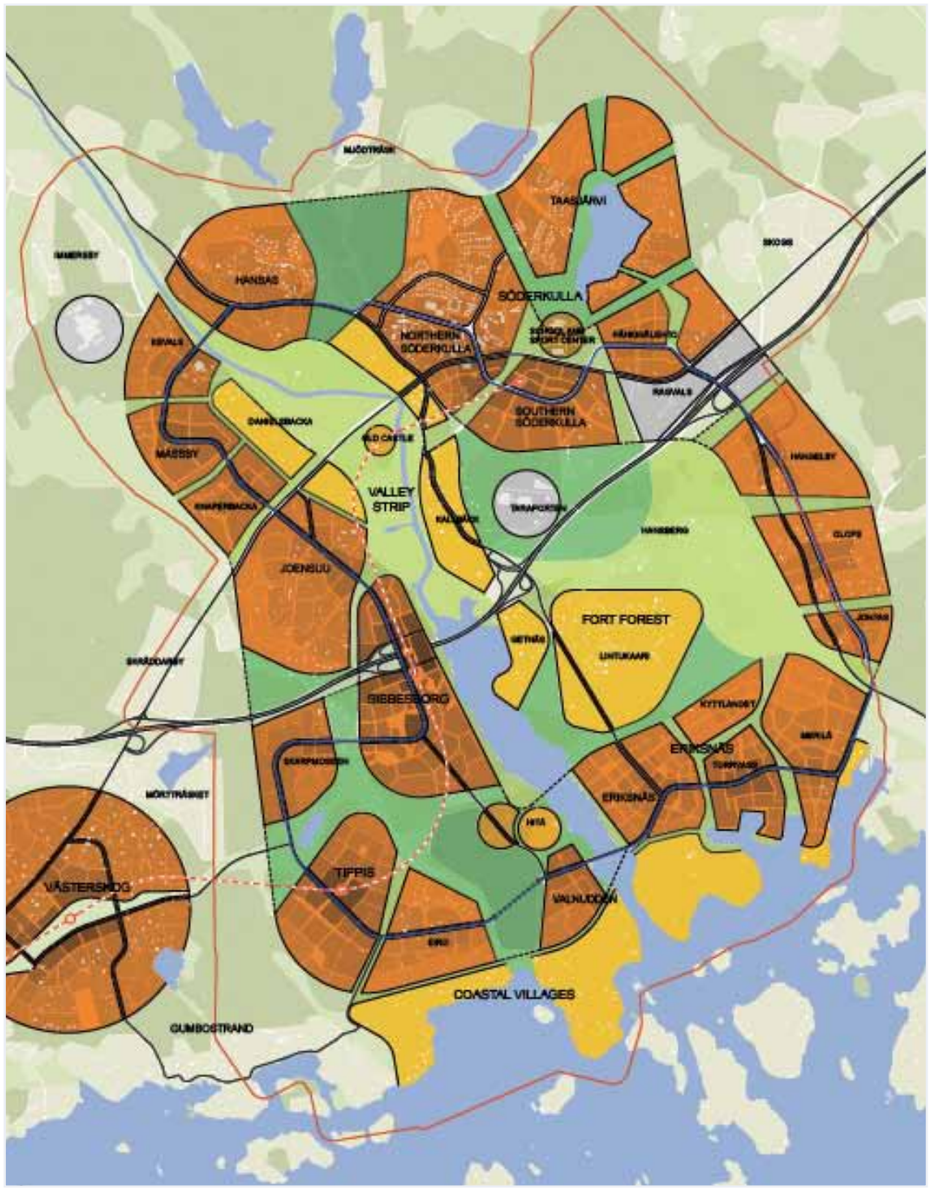


3RD PRIZE €35,000

The jury decided to grant third prize to the submission 'Sibblings'.

'Sibblings' proposes one of the best overall urban structures of the competition. Strong public transport corridor following the motorway gives flexibility regarding different metro and train decisions. The main centres on that corridor are correctly in the middle of the whole proposed urban structure, taking benefit of the regional connectivity of the motorway. Secondary centres are proposed on the seashore both sides of the Sipoo Bay. Urban typology of central, urban and suburban environments is logical, phasing well demonstrated and social aspects of new development understood. The potentials of the strong plan are not fully developed, however. Urban design and architecture of the new estates is rather standard, making non-convincing historical references. The two main centres are split by the motorway, lacking light transport connection between them.

5 Result Of The Competition - Two Special Prizes Of €12,500 Each



In addition to this, €25 000 was awarded in the form of special prizes, in the manner in which the jury saw fit. These special prizes acknowledge submissions in which a certain sector of the competition has been dealt with in an especially outstanding manner.

Two special prizes of €12 500 each:

The jury decided to grant the special prizes, in no particular order, to the following submissions: ‘Cycle!’ and ‘Urbi et orbi’.

‘Cycle!’

Being a well-developed project in most respects, ’Cycle’ excels in proposing a mass-customised building process to cater for different lifestyles and to foster local sustainable economics.

‘Urbi et orbi’

‘Urbi et orbi’ achieves an immediately recognizable and iconic urban form for Sibbesborg. It demonstrates the potentials of very high densities both in terms of eco-efficiency and brand.

5 Result Of The Competition - Three Honourable Mentions

Furthermore, the jury decided to grant three honourable mentions, in no particular order, to the following submissions: ’Letters from Sibbesborg’, ’The City Game’ and ’Vesi/ Heart and Soul’.

’Letters from Sibbesborg’

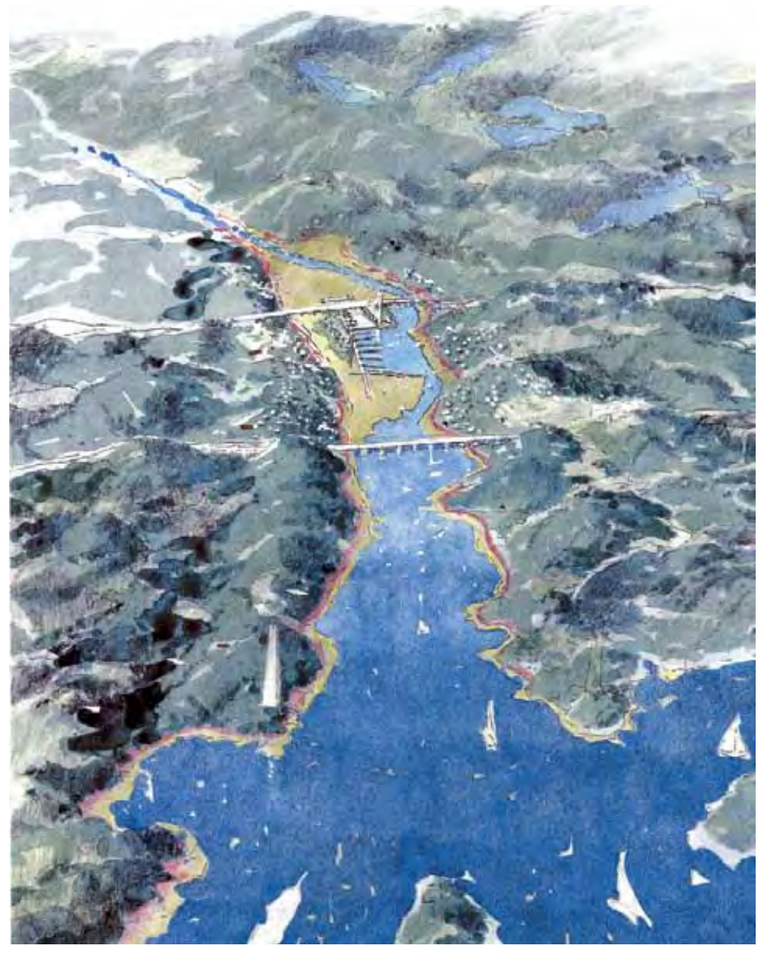
’Letters from Sibbesborg’ for demonstrating the potentials of emphatic local and people-based development process and community-formation.

’The City Game’

’The City Game’ for excellent ideas on planning process and economic incentives and management as well as the creation of local market for sustainable choices.

’Vesi / Heart and Soul’

’Vesi /Heart and Soul’ for emphasizing the uniqueness of the Sipoonlahti fjord and visualizing its power as an urban asset in a poetic way.



6 RECOMMENDATION FOR ACTION AFTER THE COMPETITION

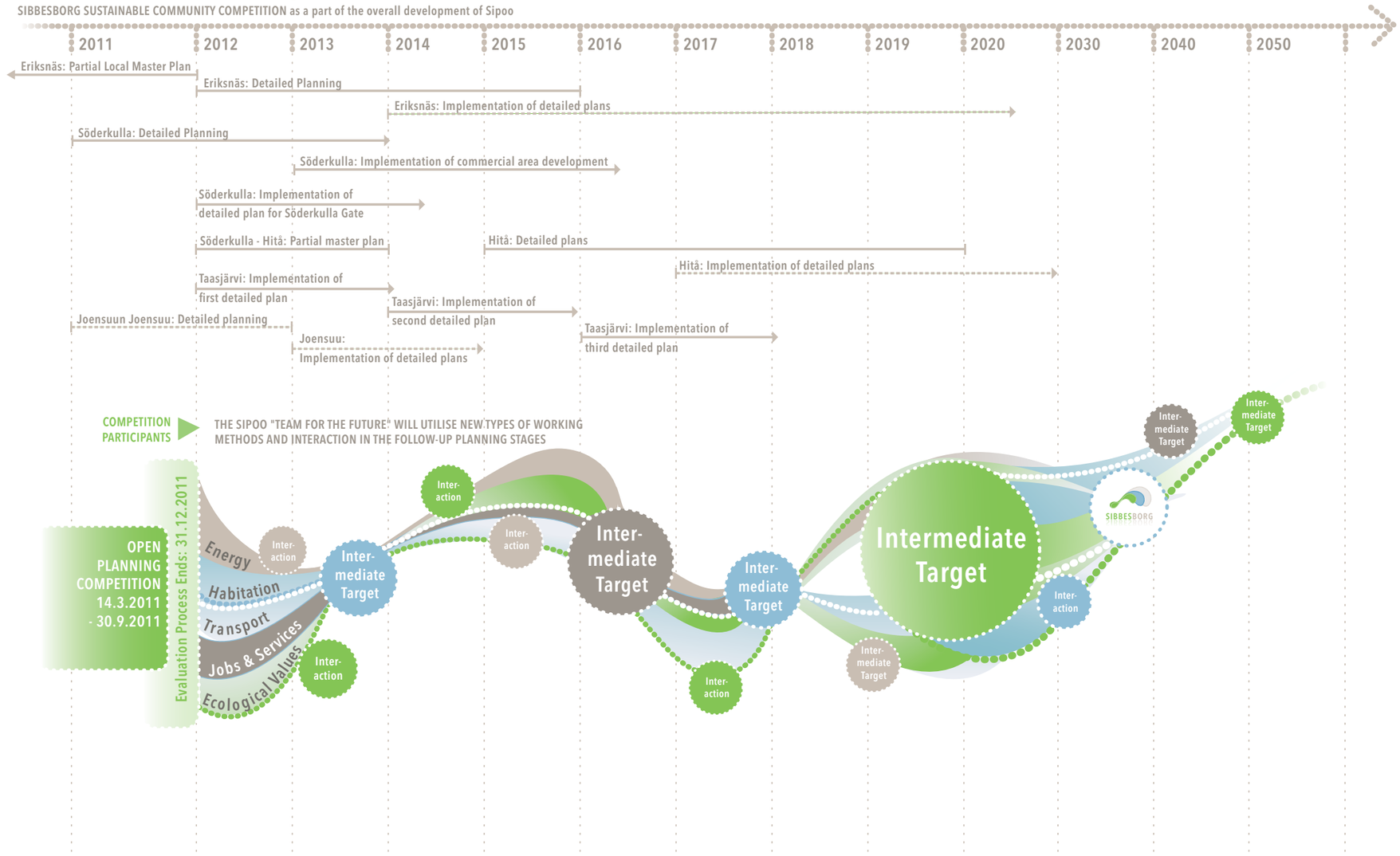
6 Recommendation For Action After The Competition

Based on the results of the competition, the jury has made its recommendations on follow-up operations.

Taking into account that the Sibbesborg Competition for Sustainable Community Development is part of the procurement process linked to the land use development of the municipality of Sipoo and regulated by the public procurement law, the Jury recommends that the winning entry “Nourish!” is taken as the starting point of planning and future cooperation. This way, the competition has functioned as a quality evaluation phase of the tendering process. The relevant timetable and procedures will be defined at a later date.

The jury makes the following suggestions for further development of the winning entry ”Nourish!”: In the follow-up process, particular attention should be paid to the themes of energy, water, green spaces, and creating city life, services and jobs. The transport solution should also be studied further and the two centres diversified to provide different options for lifestyles and building typologies. The jury’s more detailed instructions for further development can be found in evaluations of each entry.

SIBBESBORG Development Process



7 SIGNATURES TO THE EVALUATION MINUTES

7 Signatures To The Evaluation Minutes

SIBBESBORG

Kestävän yhdyskunnan suunnittelukilpailu
www.sibbesborg.net

THE JURY APPOINTED BY THE COMPETITION ORGANISERS:

Board Chair, Christel Liljeström
Municipality of Sipoo

Board Member, Harry Hänninen
Municipality of Sipoo

Board Member, Caspar Berntzen,
Municipality of Sipoo

Development Manager, Architect Mikko Aho
Municipality of Sipoo

Area Development Architect, Landscape Architect, Sirkku Huisko
Municipality of Sipoo

Senior Architect, D.Tech. Aulis Tynkkynen
Ministry of the Environment

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sibbo

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SIBBESBORG

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INTERNATIONAL MEMBERS OF THE JURY:

Professor Wulf Daseking,
Director of the Freiburg City Planning Office, Freiburg,
Germany

Professor Patricia McCarney,
Founding Director of the Global Cities Program,
Toronto, Canada

MEMBERS OF THE JURY APPOINTED BY THE ASSOCIATION OF FINNISH ARCHITECTS:

Architect Marja Sopanen

Professor, Architect Panu Lehtovuori

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8 OPENING OF THE NAME ENVELOPES

8 Opening Of The Name Envelopes

1st Prize
Pseudonym ‘Nourish!‘
(Submission no. 10)

WSP Finland Oy

Authors:

- Katriina Rosengren, Architect M.Sc. SAFA
- Anri Lindén, Architect M.Sc. SAFA
- Jenni Lautso, Architect M.Sc. SAFA
- Björn Silfverberg, M.Sc., Traffic Engineer (DI)
- Reetta Putkonen, M.Sc., Traffic Engineer (DI)
- Suvi Järvinen, M.Sc. Social Sciences (YTM)
- Mirjam Larinkari, Landscape Architect
- Satu Niemelä- Prittinen, Landscape Architect, MARK

Working group:

- Jussi Viinikka, Student of Architecture
- Tomi Jaskari, Student of Architecture
- Jani Päivänen, Master of Political Science (VTM)
- Annukka Engström, Master of Arts (FM)
- Mikko Muoniovaara, M.Sc., Engineering (DI)
- Terhi Tikkanen- Lindström, Architect M.Sc.

2nd Prize
Pseudonym ‘Balance‘
(Submission no. 15)

Serum Architects Ltd

Working group:

- Vesa Humalisto, Architect M.Sc. SAFA
- Antti-Markus Lehto, Architect M.Sc. SAFA
- Sami Heikkinen, Architect M.Sc. SAFA

Consulting experts:

- Petja Partanen, M.Sc., Engineering
- Tapani Särkkä, M.Sc., Transport Planning and Engineering

3rd Prize
Pseudonym ‘Sibblings‘
(Submission no. 7)

Authors:

- Jouko Kunnas, Architect M.Sc., Liidea Oy
- Juho Rajaniemi, Architect M.Sc. SAFA, Doctor of Technology, Arkkitehti Oy Rajaniemi

Assistant:

- Johanna Rajaniemi, Student of Architecture, Arkkitehti Oy Rajaniemi

Traffic Experts:

- Tuomo Vesajoki, M.Sc., Engineering, Liidea Oy
- Toni Joensuu, M.Sc., Engineering, Liidea Oy
- Vesa Verronen, M.Sc., Engineering, Liidea Oy

8 Opening Of The Name Envelopes

Special prize
Pseudonym ‘CYCLE!‘
(Submission no. 9)

Arkkitehtitoimisto
Petri Rouhiainen Oy

Authors:

- Petri Rouhiainen, Architect M.Sc. SAFA
- Antti Mentula, Architect M.Sc. SAFA
- Pekka Vehniäinen, Architect M.Sc. SAFA

Main assistant:

- Sirpa Törrönen, Landscape Architect, MARK

Other assistants:

- Carlos Lamuela, Architect M.Sc. SAFA
- Laura Kiijärvi, Student of Architecture.
- Lasse Olaste, Student of landscape architecture

Special prize
Pseudonym ‘Urbi et orbi‘
(Submission no 24)

Authors:

- Hannu Normo, M.Sc. Architecture SAFA
- Tuomas Autere, M.Sc. Architecture SAFA
- Pekka Normo, M.Sc. Engineering

Honourable Mention
Pseudonym ‘VESI / HEART AND SOUL‘
(Submission no 26)

School of Architecture and Planning,
The Catholic University of America

Authors:

GROUP VESI

- Miriam Gusevich
- Jay Kabriel
- Scott Aker
- Anna Cere
- Mariel Deppner
- Erica Penttila

Honourable Mention
Pseudonym ‘THE CITY GAME‘
(Submission no 18)

Authors:

- Martti Kalliala, Architect M.Sc.
- Tuomas Toivonen, Architect M.Sc. SAFA, NOW for Architecture and Urbanism
- Hedwig Heinsman, Architect M.Sc., DUS Architects

Contributors

- Hans Vermeulen, DUS Architects
- Inara Nevskaya, DUS Architects
- Nene Tsuboi, NOW for Architecture and Urbanism
- Timo Arjanko, Student of Architecture
- Sassi Heiskanen, Student of Architecture

Honorable Mention
Pseudonym
‘LETTERS FROM SIBBESBORG‘
(Submission no 4)

Authors:

- Luca De Gol, M.Sc. Architecture
- Samir Bhowmik, M.Sc. Architecture SAFA, AIA