

Comprehensive manual for the Community Capital Scan

Introduction

The Community Capital Scan is a web application internet based instrument developed by the Centre for Sustainable Community Development (CSCD) of Simon Fraser University (Vancouver, Canada) and Telos, the Brabant Centre for Sustainable Development of Tilburg University (Netherlands). The scan offers the opportunity to gain an ***advance*** insight in a simple way into how projects or programmes are expected to contribute to the sustainable development of a community or region. This insight is obtained by asking all the relevant stakeholders involved in a project or programme to give their opinion of it by means of a structured questionnaire. The questions relate to the six capitals of the community capital framework that has been developed by the CSCD in general and by Mark Roseland in particular. In this framework six capitals are distinguished: natural, physical, economic, human, social and cultural capital. Sustainable community development is seen as the balanced development of these capitals. To facilitate interpretation, the outcomes are presented graphically. In addition, the scan offers an opportunity to make a wide range of suggestions for improvements to the project. There is also the option to fill in the Community Capital Scan individually.

Who is the Community Capital Scan aimed at?

The Community Capital Scan has been developed primarily so that the expected impact of a project or programme on the sustainable development of a community can be talked about within or with a group of stakeholders at an early stage and in a structured way. By doing this at an early stage, it is then possible to make adjustments to the project if the outcomes of the scan suggest that this is necessary.

In the case of a group scan, one person always has to take on the role of “project manager”. This person invites the participants to fill in the scan. The scan is freely available on the internet and offers the opportunity to fill in the scan either at home or elsewhere. Via an e-mail with a link (or a code), participants are sent straight to the correct page/project/scan and can then start to score and fill in their opinion and make suggestions for improvement. When all the participants have finished scoring, the scan is closed and the results are immediately available to everyone. Participants can see both their own results and the group result. The scan also shows where participants are in agreement and where they are not.

The scan is filled in anonymously. Not even the project manager can view the questionnaires that have been filled in.

When should the Community Capital Scan be used?

The Community Capital Scan has a broad application. The scan is particularly useful for evaluating plans/developments at an early stage, before investments are actually made. During this phase there is usually still enough room to adjust the plans. But the scan also can be used to make a SWOT analysis of a community or region.

Preconditions

Preconditions for carrying out an effective scan:

- It is essential that the person responsible for the project or programme (owner, administrator, investor) wants a Community Capital Scan to be carried out.
- This person must also be willing not only to discuss the outcomes of the scan but, if required as a result of the discussion, to also do something with the outcomes of that discussion.
- The various relevant interests and interest groups must be adequately represented within the group which carries out the scan so that the most balanced possible assessment of the possible impact of the project can take place.
- Adequate, reliable information about the project must be available in advance so that, as far as possible, everyone has access to the same information.
- A good process supervisor is needed who ensures that the various opinions and interests are addressed adequately and in a balanced way.

How does the Community Capital Scan work?

According to the Community Capital Framework approach sustainable development is seen as the balanced development of the six community capitals. With the aid of the Community Capital Scan an evaluation is made, in advance, of whether a project contributes to the basic principle of a balanced development of the six community capitals.

How does it work? Each of the six capitals is subdivided into pieces which we call stocks. The functioning of these stocks, both individually and in conjunction with the others, determines the development of the six capitals. The table below shows for each capital the stocks of which it is comprised.

Capital	Stock
Natural	Land
	Soil
	Groundwater
	Surface water
	Air
	Minerals and Non-Renewable Resources
Physical	Infrastructure
	Land
	Public Facilities
	Housing and Living Conditions
	Transportation
Economic	Labour
	Financial Resources
	Economic Structure
Human	Education
	Health and well-being
Social	Citizenship
	Safety
Cultural	Cultural Heritage
	Identity and Diversity

Long-term goals have been formulated for each of these stocks. Added together all these objectives provide a picture of how a sustainable community might look. To illustrate this, the following are two examples of long-term goals. (For a full overview of the capitals, stocks and requirements, see Annex I). The long-term goal for the stock “Land” in the natural capital is that biodiversity must be preserved, that nature must be maintained as far as possible and strengthened if possible and that scenic and attractive views should be preserved. One of the goals formulated for the “Labour” stock in the economic capital is that the labour market should be in balance (enough work, and no vacancies which are difficult to fill) and that work should be safe, healthy and allows for appropriate work life balance. If we wish to assess a project in terms of its sustainability impact we are actually asking ourselves the question: Does this project contribute to the realisation of the long-term goals which we have formulated for each of the stocks? And if so, to what extent? This is why it needs to be specified for each stock whether the project concerned will have a positive, negative or no effect on the realisation of the long-term goals which relate to that stock. In the case of stock “Land” for example, this concerns the issue of whether the project contributes to and/or has an impact on the preservation of biodiversity, and that nature is preserved as far as possible and strengthened where possible etc. The impact is shown by filling in a score on a scale ranging from -5 to +5. The more positive the impact, the more the score shifts towards +5, the more negative the impact, the more the score shifts towards the -5. If there is no impact or a neutral impact, the score 0 is filled in.

The scan offers the opportunity to further comment on the score that is given (reasoning). Suggestions may also be made to improve aspects of the project.

The long-term goals have deliberately been formulated in broad terms. It may sometimes be practical, useful and sometimes even necessary for a specific project to further elucidate or particularise the long-term goals. The project manager has the opportunity to do this.

Results

Individual results

As soon as a participant has given all the stocks a score, he/she can see what the individual result is. It is not possible to see the individual result until all the stocks have been scored. The individual result consists of 3 components:

1. The sustainability hexagon

The sustainability hexagon (see figure 1) which shows whether there is balanced development. In the figure this is expressed through a change in shape to the dotted line of the original equilateral hexagon: it becomes larger or smaller. Or asymmetrical, to illustrate that there is an imbalance in the development of one or more of the community capitals. The hexagon below shows that all capitals, with the exception of the economic capital, are growing. In the eyes of the stakeholders involved, the project has a very negative impact on the development of the economy.

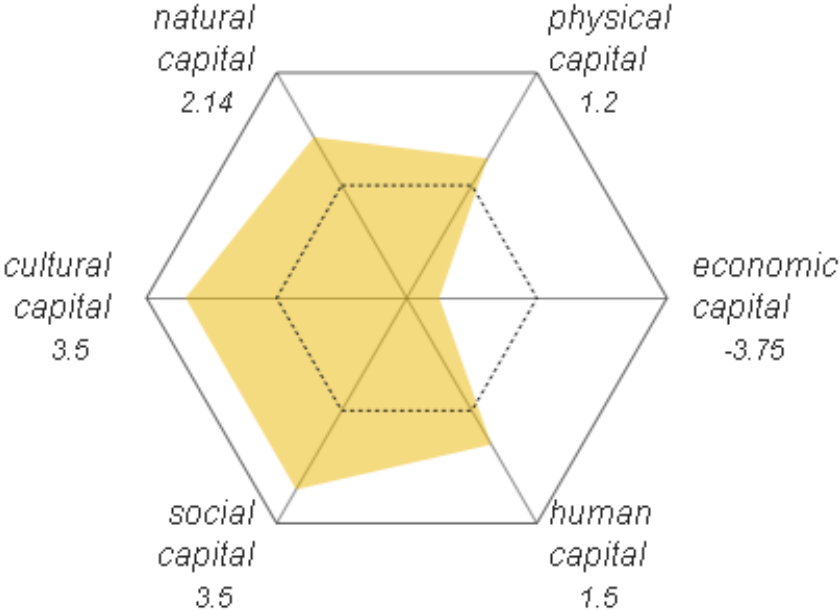


Figure 1: Sustainability Hexagon

2. Pie charts

Pie charts show the stocks upon which the project is expected to have a positive impact (the green pie chart sectors) and those upon which a negative impact is expected (the red pie chart sectors). If the impact is neutral or if there is no impact at all, the sector is coloured light grey. The colour of the sector gives a first indication of the expected impact. The size of the sector is also important. The larger the green sector, the more positive the impact, the smaller the red sector, the more negative the impact.

Figure 2 shows the impact of a project on the physical capital which consists of the stocks infrastructure, land, transportation, housing and living conditions and public facilities. It is clear at a glance that the project has a negative impact on the infrastructure and especially on transportation. On public facilities, land and especially living conditions the project has a positive impact.

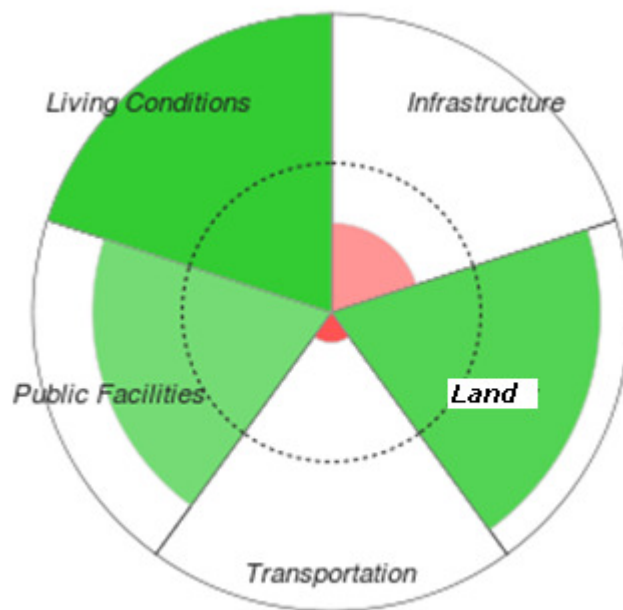


Figure 2: Pie chart showing physical capital

3. Comments

The third result that the scan shows is an overview of the reasoning for scoring and points for improvement of the project. During the scoring, each participant has the opportunity to comment on his/her score. In addition, suggestions may also be made for improving the project. To illustrate, an overview of the reasoning and points for improvement is shown below. These concern the so called Gondola project, a proposed transportation project in which the accessibility of Simon Fraser University in Vancouver will be improved by building a new transport infrastructure.

	Reasoning	Points for improvement
Physical capital		
Infrastructure	new transit infrastructure	expanded links to further reduce bus use
Land		
Transportation	Many snow days prevent students from arriving at class on time or at all. Buses sometimes drive in unsafe conditions.	
	Safer, more reliable, and faster transportation than status quo.	
Public Facilities	Will help provide transportation for the increased population expected on Burnaby Mountain.	
	Easier access to schools and facilities	
	Help for university facilities	
	Better access to a major university.	
Living Conditions	Better quality of life for students!	

Group scan

In the case of a group scan, once the closing date for filling in the scan has elapsed, the participant may, as well as viewing his/her own result, also view the communal result. In addition to the sustainability hexagon and the pie charts, a scatter diagram is also shown (figure 3) which displays whether participants are in agreement or not. The pie chart shows how the various stocks in all probability will be affected. The scatter diagram shows the extent to which the opinions of the various participants differ. In the example it is clear that opinions differ not really as far as the direction of the influence is concerned. There are some differences with regard to how negative or how positive the influence of the project will be on the stocks transportation resp. land.

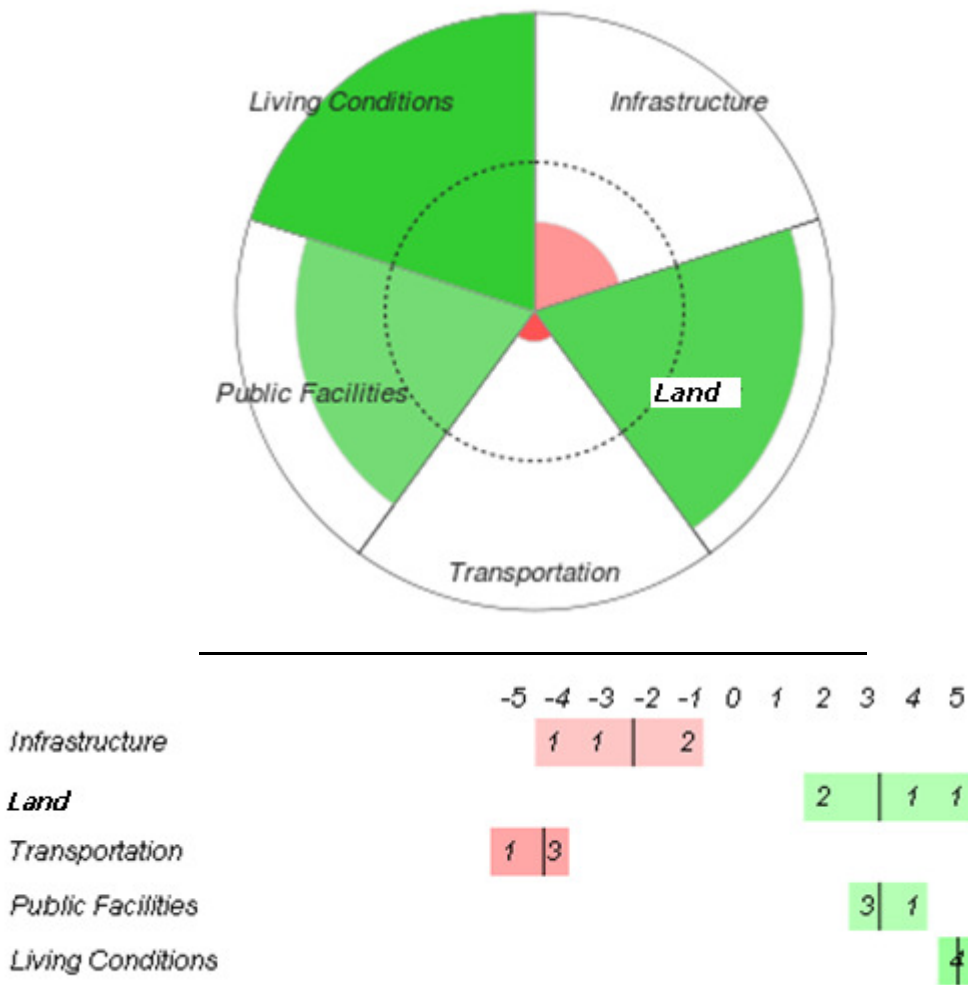


Figure 3: Pie chart and scatter diagram (Physical Capital)

The scan offers the possibility to divide the participants beforehand and to show if the results differ between the distinguished groups. This dividing can be done in several ways. One way is according to the interests the stakeholders represent in the planning and developing process. In this case a distinction can be made between stakeholders who are representing the environmental issues which are at stake, stakeholders who are representing the profit issues (businesses, farmers, developers) and stakeholders who are representing the interests of the citizen of the community. Another way of dividing the group of participants is to look at the role or (formal) position participants have in the planning and developing process. In this case a distinction can be made between e.g. municipal staff, elected local officials, local stakeholders, regional government etc. The scan offers the opportunity to distinguish 9 groups which are labelled with the help of capitals: A, B, C ... I. This labelling has to be done in advance. If for one reason or another more groups should be distinguished a second scan should be ran. The results of each group (hexagon, pie charts, scatter diagram, comments) can be shown separately. By comparing the results of the groups it becomes clear if there are differences between the groups in expectations about the impact of the proposed project.

Step-by-step plan for implementing a Community Capital Scan

In order to implement a Community Capital Scan in a group setting, the following steps may be distinguished:

1. There is a project manager who either takes a decision to carry out a Community Capital Scan or is assigned to do so.
2. The project manager decides whether the Community Capital Scan is to be carried out during a joint session or whether stakeholders will be invited via e-mail to fill in the scan. In the first case, during the workshop session the project manager will assign a unique code to each participant which will enable the participant to start to score straight away. In the second case, the project manager also goes through steps 8 to 10.
3. The method of implementation of the Community Capital Scan needs to be decided: group scan or group scan plus (stakeholders are divided into groups according to the interest that they represent).
4. It needs to be determined which stakeholders should be invited.
5. It should be ensured that there is effective provision of information about the project which is to be assessed so that all the participants have the most relevant information.
6. It should be determined whether the questions which are asked in the Community Capital Scan need any further explanation. The clearer the questions the more accurate the scan result.
7. A clear introduction needs to be given to the Community Capital Scan participants regarding the how and the why of the Community Capital Scan. It is also important to specify what will be done with the results.
8. If the project manager has chosen to have the Community Capital Scan carried out via e-mail then it is essential to collect all the e-mail addresses, names, organisation details and telephone numbers of the people who will be participating in the Community Capital Scan.
9. Invitations will then be sent via de Community Capital Scan to all the participants (an automatic e-mail message is generated for each participant).
10. The project manager monitors progress: has everyone filled in the scan yet?
11. Closing the scoring process and analysis of the group result.
12. Organising and implementing an evaluation/discussion session for all participants and ensuring effective supervision of the process.
13. Follow up of all matters that emerged from the evaluation/discussion session.

Each step worked out in detail

Step 1: Appointing a project manager who is responsible for the implementation of the Community Capital Scan

To carry out a Community Capital Scan in a group setting it is essential that there is a project manager who is responsible for carrying out the scan. This project manager may decide independently to have a scan carried out, but he/she may also be tasked with this by, for example, a responsible administrator (member of the Provincial Executive, chair of an executive committee, dike warden (chair of a water board), investor) or at the request of one or more stakeholders.

The project manager needs to familiarise him/herself with the methodology and is responsible for organising the process.

Step 2: Choice: to fill in the scan during a joint session or via e-mail?

The choice of one form or the other has consequences affecting content, process and organisation. Choosing to fill in the scan during a joint session means in any case that a suitable location needs to be organised, and ensuring that enough computers are available each with a wireless connection to the internet. At the location the participants are each given a unique code which enables them to carry out the scan immediately. The advantage is that the results are quickly available and can be discussed. Moreover, additional clarification can be provided during the session and anything that is not clear can be explained. Generally speaking, this requires the presence of a good process supervisor who needs to have a considerable talent for improvisation.

If the scan is carried out via e-mail this means that the necessary details will need to be collected from the participants. After completion of the scan the results can be analysed calmly which makes the preparation of a joint discussion session (step 12) easier.

Step 3: Determining which type of scan

If it is important to consider and discuss the result of a group of stakeholders separately then it is advisable to choose the Group scan plus. It is then possible to divide the stakeholders according to their interest or to the (formal) role they have in the process. Thus, for example, all “environmental groups” can be grouped as well as all entrepreneurs and their representatives. This enables a separate analysis to be made of the opinions of the “environmental groups” or of the entrepreneurs. If such in-depth exploration is not necessary, then you should choose the ordinary Group scan. Whichever scan is used, each stakeholder must answer the questions on all the capitals. This is important because we want stakeholders to not only have an in-depth knowledge of their own interests but also to be aware of those of the others.

Step 4: Composition of stakeholder groups

This is a crucial step in the Community Capital Scan. In this step it is important to consider the question of which goal is being pursued via the Community Capital Scan. Is it a more or less informal kind of stakeholder consultation without this necessarily leading to an adjustment of the plans or is it a question of obtaining broad social support for the plans which are to be implemented? The latter case is not an informal exercise. All this needs to be well thought-out beforehand and also clearly communicated to the parties who are to be invited. In a nutshell: ***Manage Expectations!*** Drawing up a good inventory beforehand of which interests and interest groups will be affected by the project is crucial. If certain groups are overlooked and do not get invited, this can cause a lot of problems further along in the process. Incidentally, this is not to say that every stakeholder should therefore automatically be invited. A certain degree of selectiveness is usually required.

Step 5: Compiling information about development/project

The purpose of this step is to ensure that everyone within the stakeholder groups is provided with all the relevant information. This should all be in a readable form (not too much of it and above all easily accessible). Poor information provision results in more discussion during the evaluation/discussion session.

Making the information available via internet fits in well with using the Community Capital Scan.

Step 6: Going into more depth about the stocks

The standard questions in the Community Capital Scan relating to each stock have deliberately been formulated in broad terms. It can sometimes be useful to provide a more detailed explanation for each stock which is more tailored to the project that is to be assessed. However, care is needed to ensure that the explanation does not conflict with the general tenor of the aims/long term objectives which apply to the stock concerned. But take care: too much specific detail raises the danger that a broad interpretation will then no longer be possible. Formulate the extra information as neutral as possible in order to prevent influencing the stakeholders beforehand.

Step 7: Providing general information about the hows and whys of this Community Capital Scan

Before the scan is actually filled in, it is important to inform the stakeholders about the hows and whys of the scan. This could be in the form of an information session or via a detailed e-mail. In any case, the following points need to be addressed:

- The stakeholders who will be participating in the scan.
- Explanation of the purpose of the Community Capital Scan and the expectations with regard to the process which is to be gone through.
- General background information about the Community Capital Scan and Sustainability.
- Explanation of how to carry out the Community Capital Scan.
- Name of contact person (e-mail address, telephone number) who will deal with any questions or queries.

Step 8: Collecting information from the participants

In order to be able to invite everyone, it is essential to collect at least the e-mail address and full name of each participant.

In addition, a telephone number is useful in case anyone needs to be chased up to get their scores in on time.

Step 9: Inviting participants

The project manager fills in the e-mail addresses of the participants on the relevant page of the Community Capital Scan. The Community Capital Scan then automatically sends invitations to the e-mail addresses of the participants. The invitation contains an explanatory text and a link via which the scoring can be started straightaway. The project manager also sets a concrete closing date. It's possible to add new or remove already invited participants as long as the scoring process has not been stopped

Step 10: Progress of the scoring

It is important for the project manager to continue to monitor who has and who has not yet scored. Sending a timely e-mail reminder or, even better, making a phone call to those people who have not yet scored does help.

Step 11: Closing the scoring process and analysis of group result

Once the closing date has been reached, the project manager closes the scoring process. It is only after this point that the project manager is able to look at the group result.

The group result comprises the sustainability hexagon, six pie charts (one for each community capital) and a scatter diagram for each capital.

The line of approach of the analysis focuses on a number of generic issues which are briefly discussed below. Of course, every scan is different and each scan has its own characteristics.

Various lines of approach in the analysis:

- The **sustainability hexagon** shows pictorially whether the project (in the opinion of the participants) contributes to the development of each of the community capitals. This comprises both the question of whether the capitals are growing and whether this is happening in a balanced way (figure 1).
- The **pie charts (figure 2)** show where the project is expected to have a positive, negative or neutral impact on the various stocks. If the expected impact is negative, i.e. if the average score is lower than 0, this is indicated by the colour red. If a neutral impact is expected, i.e. an average score of 0, this is shown by a white or grey colour and if a positive impact is expected, i.e. an average score higher than 0, this is indicated by the colour green. Particularly if it is expected that the project will in all probability lead to a negative impact on the development of a particular stock (a red pie slice) then this is a reason to devote additional serious attention to this stock during a group session or during the further development of the project.
- The **scatter diagrams (figure 3)** indicate how many participants have scored a particular value on a particular question. This creates a picture of whether the participants are in agreement regarding the expected consequences of the project for particular stocks. If the dispersion is small there appears to be consensus, if the dispersion is large then a discussion is called for. Among other things, a large dispersion can point to:
 - Variations in the interpretation of the question.
 - Disparity among those filling in the scan in terms of their knowledge/information/expertise.
 - Differences in the interests of those filling in the scan.It is a good idea, during the discussion on the outcomes, to devote attention to the dispersion of the answers. It may be that the discussion subsequently leads to the results of the scan being adjusted on this point, but it is also possible that a difference of opinion remains. Incidentally, it is important to the process to begin by determining together those areas where there is a high degree of consensus. Workshops often focus on that one issue on which parties are not in agreement while overlooking the fact that there are a large number of issues on which there is no difference of opinion.
- For each question the participant also has the opportunity to **explain why they have given a particular score and to come up with suggestions for improvements**. Once the period for scoring is closed, all the comments (reasons and suggestions for improvement) become available. For the project manager this is valuable information for the further development of his project.

Step 12: Organising an evaluation/discussion session

This meeting is the most important activity in the entire Community Capital Scan process! In this session all the results and thus all the sensitivities and differences of opinion can be addressed. Incidentally, it is important (and see step 11 above) to not only focus on the differences of opinion but also to determine those areas where there is agreement.

The extent to which all the various issues can be openly addressed in an effective way is very important. In situations in which there are wide differences of opinion and the level of sensitivities is high, effective process supervision is absolutely essential, preferably carried out by a neutral person who is accepted by all parties.

All the stocks are reviewed in the light of the group result and the comments. Any “odd” issues are put on the table and discussed.

It is important to draw up a report of this meeting in which the discussion and also the areas of common ground are accurately recorded. The report is subsequently sent to each participant in the session. It constitutes an integral part of the Community Capital Scan and the group process which has been gone through.

Step 13: Follow up activities in response to the session

In order to keep stakeholders motivated in the communication and discussion process that was started up by the Community Capital Scan, the following things need to be done: stakeholders should be given the report from the discussion evening; they also need to be given an indication of the way in which the project is to be continued; they need to be informed of what is going to be done with the discussion and action items and what the role of the participants will be in the next stages of the project.

Annex I: Capitals, stocks and requirements

Capital	Stock	Requirement
Natural	<i>Land</i>	<p>Ensure protection of biodiversity</p> <p>Increase preservation of natural areas and sensitive ecosystems by parks or conservation areas</p> <p>Preserve scenic and attractive views</p>
	<i>Soil</i>	<p>Eliminate all pollutants and contaminants</p> <p>Expand the preservation of fertile agricultural land</p> <p>Eliminate soil erosion or instability</p>
	<i>Groundwater</i>	<p>Eliminate all pollutants and contaminants</p> <p>Preservation of existing reservoirs and replenishment through natural processes</p>
	<i>Surfacewater</i>	<p>Eliminate all pollutants and contaminants</p> <p>Ensure that surface water quality is suitable for human and agricultural use</p>
	<i>Air</i>	<p>Eliminate all pollutants and contaminants</p> <p>Reduce greenhouse gas emissions</p>
	<i>Minerals and nonrenewable resources</i>	<p>Reduce the extraction rate of nonrenewable resources</p> <p>Use only environmentally safe extraction practices</p>
Physical	<i>Infrastructure</i>	<p>Provide safe and reliable water to all citizens</p> <p>Ensure that waste management systems are clean and efficient</p> <p>Ensure that energy is transmitted through a safe, efficient, and reliable system</p> <p>Provide adequate access to reliable telecommunications systems for all citizens</p>
	<i>Land</i>	<p>Ensure that suitable land is available for different uses, eg., industry, agriculture, housing, etc.</p>
	<i>Transportation</i>	<p>Create a robust and reliable public transportation system</p> <p>Provide safe, efficient, and well-maintained rail and road infrastructure</p>
	<i>Housing and living conditions</i>	<p>Ensure adequate access to housing, food and clothing for every citizen</p>
	<i>Public facilities</i>	<p>Ensure adequate facilities for schools, hospitals, community centers, etc.</p>
	<i>Labor</i>	<p>Balanced labor market that includes a variety of job types</p>

Economic		and salary ranges Adequate training for workforce Work is safe, healthy and allows for appropriate work-life balance Wages are adequate to provide decent livelihoods
	<i>Financial resources</i>	Public bodies have adequate financial capacity to ensure the availability and accessibility of public goods and services Local companies are able to make sufficient profit and investment
	<i>Economic Structure</i>	A good mix of productive and service industries Constant economic regeneration through innovation, new enterprise development and relocation to the community Companies are investing in emissions and pollution prevention and reducing the use of non-renewable resources
Human	<i>Education</i>	Education meet the needs of both society and individuals Education is of high quality and easily accessible
	<i>Health and wellbeing</i>	Citizens are physically, mentally and spiritually healthy All citizens have access to healthcare services for illness prevention and Treatment
Social	<i>Citizenship</i>	Community has social cohesion Social solidarity between citizens Opportunity for citizens to build strong networks between each other No poverty or exclusion
	<i>Safety</i>	Citizens feel safe and have access to support systems which encourage safety No violence and crime
Cultural	<i>Cultural heritage</i>	Art is encouraged and celebrated Community acknowledges traditions and celebrations A diversity of culture and tradition is present Cultural heritage is preserved
	<i>Identity and diversity</i>	Citizens are encouraged to express individual identity while not restricting others' freedom of expression The community has a defined identity