ESPON

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Interreg

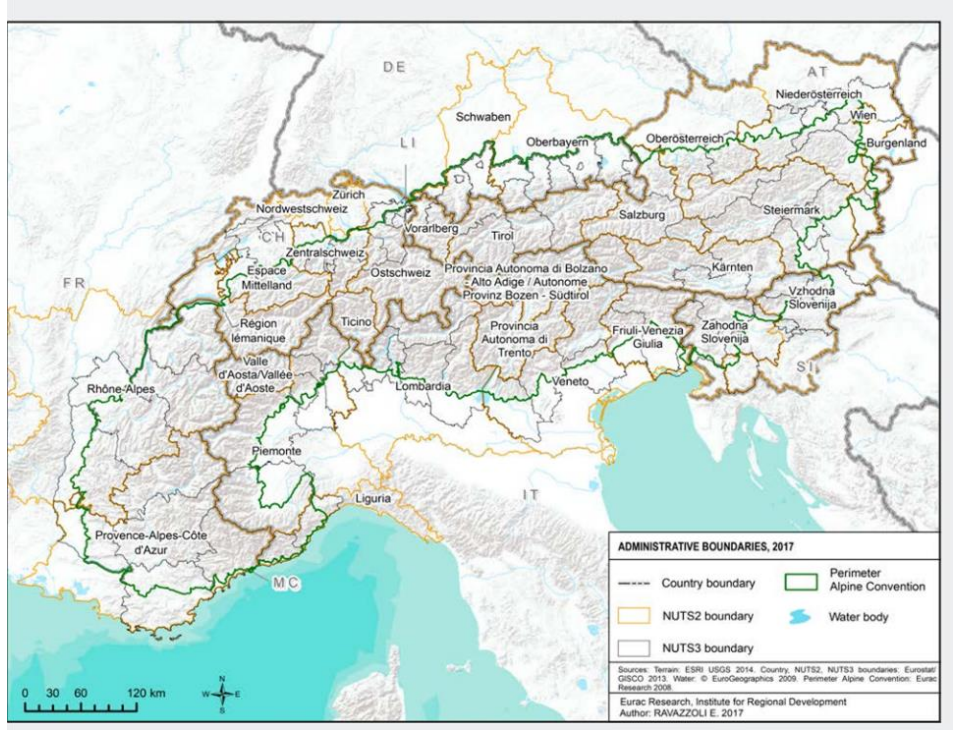
Is and will life be good enough in the Alpine area?

ESPON Territorial Study “Quality of Life in the Alpine Convention Space”

Presentation summarizing the research findings

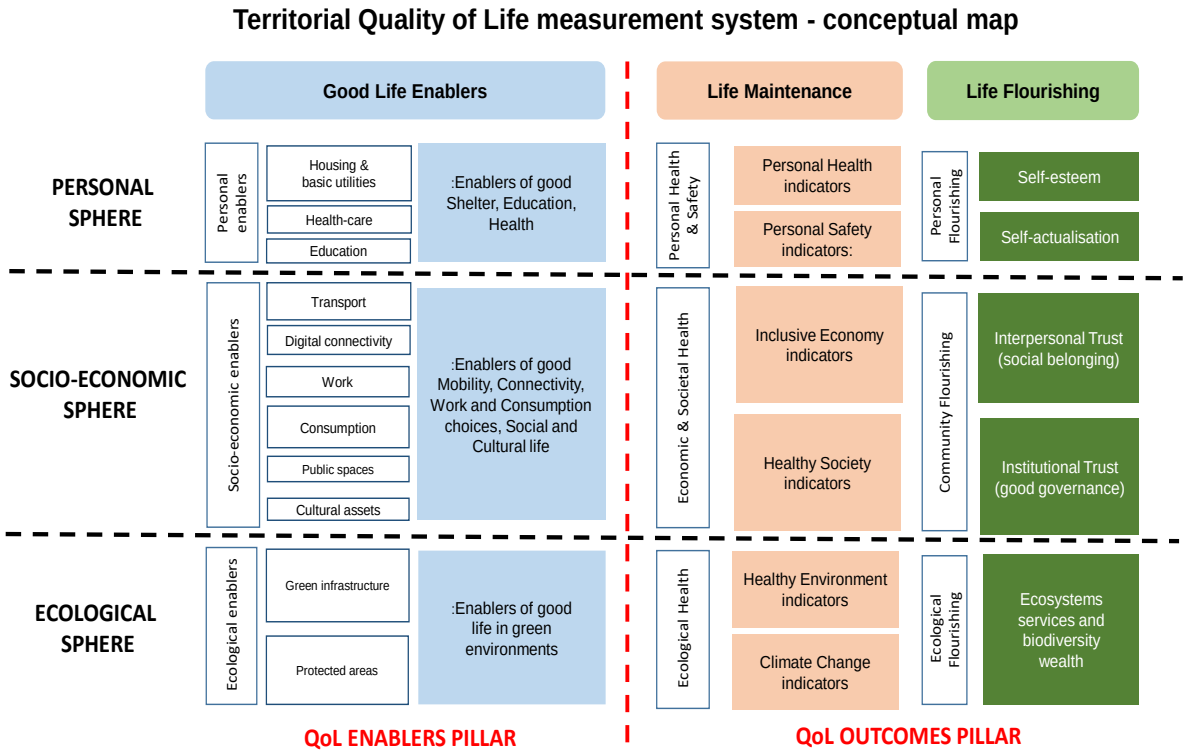
ESPON Territory Study
“Quality of Life in the Alpine Convention space”

- **An analysis** at sub-national level on the Quality of life in the Alpine Convention space, considering its territorial diversity.
- **Data, maps and figures** on Quality of life in the Alpine Convention space.
- **Test TQoL living labs** in the Alpine Convention space and recommendations to support the use of TQoL living labs in policy making. **Pilot tests** are organised in parallel in four regions: **Canton Ticino (CH), Trento (IT), Koroska (SL), Carinthia (AT)**
- **Recommendations** to the ESPON programme on how further develop the TQoL approach and how to promote Quality of life measures in policy making at all territorial levels.



ESPON QoL Project Territorial Quality of Life (TQoL) measurement framework

- Capture the results in a **structured and comparable** format
- Useful to compare quality of life indicators at **different territorial scales**
- Allowing **benchmarking** the position of a region **in a broader context** – E.g. Koroška region (Slovenia); Canton Ticino (Switzerland); Klagenfurt-Villach (Austria); Trentino region (Italy) in the context of the Alpine Convention space
- Includes a **simple dashboard tool** (.xls), available at - https://www.espon.eu/programme/projects/espon-2020/applied-research/quality-of-life
- DISCLAIMER: The current European dashboard tool includes comparable indicators available for all NUTS3 regions in Europe, not specific indicators that could be needed to analyse in depth and better interpret QoL conditions within specific regions. To perform meaningful analyses at local level it is necessary to identify the best indicators available for specific regions and use the dashboard to produce local TQoL indices and maps.

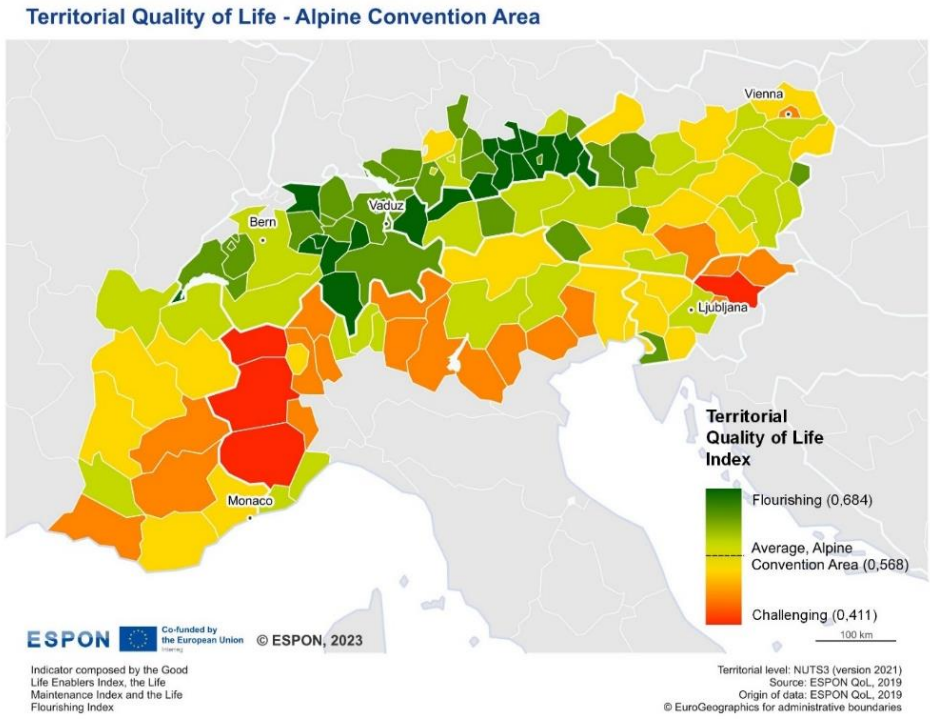


Territorial Quality of Life Index – Alpine Area

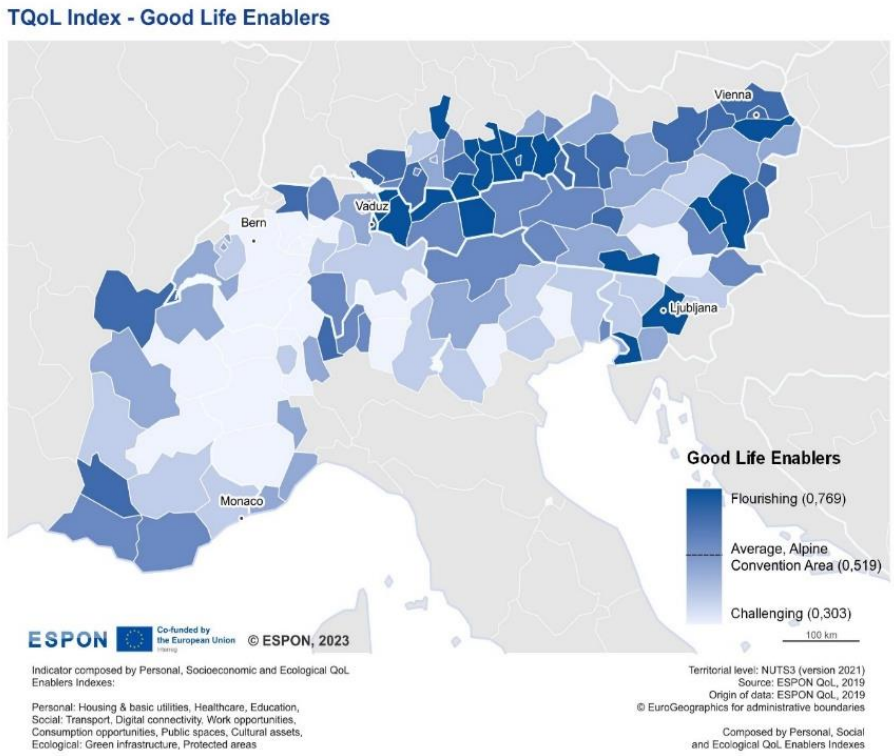
The Alpine area presents a mosaic of diverse territories, encompassing both rural and urban areas situated amidst mountainous landscapes. This diversity manifests in varying Quality of Life Indices across regions, illustrating distinct territorial profiles.

Broadly, the northern central part of the Alpine space stands out for its flourishing quality of life. This mostly depends on strong performance in Life Maintenance, a dimension which includes personal, societal and ecological health aspects.

Conversely, challenging regions are predominantly located in the south, including Piemonte, the northern area of the Pianura Padana, Les Alpes Maritimes and the eastern portions of Slovenia and Austria. These results are mostly due to lower rates of the Good Life Enablers dimension, and especially housing and healthcare deficits in Slovenia and lower scores on protected areas in Austria.



Good Life Enablers dimension – Alpine Area

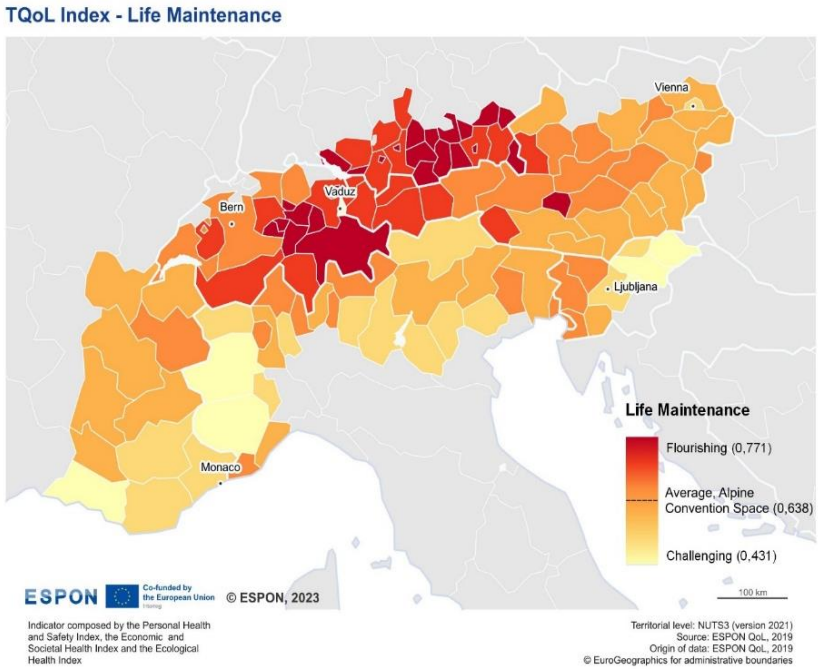


The analysis of Good Life Enablers in the region reveals a distinct pattern, with flourishing quality of life scores mostly concentrated in the northeastern section of the Alpine area.

Considering the underpinning of personal, socioeconomic and ecological domains, this pattern is mostly caused by flourishing personal (housing, healthcare, education) and ecological enablers (green infrastructure, protected areas), while socioeconomic indicators (transport, digital connectivity, work and consumption opportunities, cultural assets) tend to maintain an average status.

In contrast, personal and ecological enablers exhibit significant shortcomings in the more challenging areas distributed across the southern and southeastern regions

Life Maintenance dimension – Alpine Area

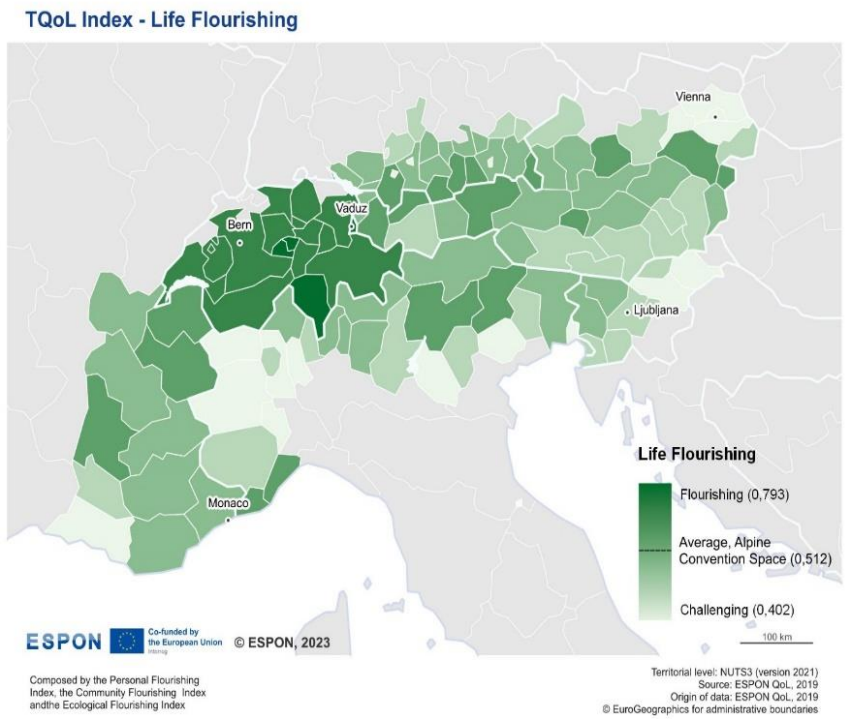


In relation to life maintenance, flourishing regions are notably centred around Vaduz in the northern part of the central Alpine area. Remarkably, these high scores are closely linked to Economic and Societal Health indicators.

Conversely, regions in challenging conditions are more concentrated in the southern part of the western Alps.

The rest of the Alpine area includes regions with average scores, dispersed sporadically across the region.

Life Flourishing dimension – Alpine Area



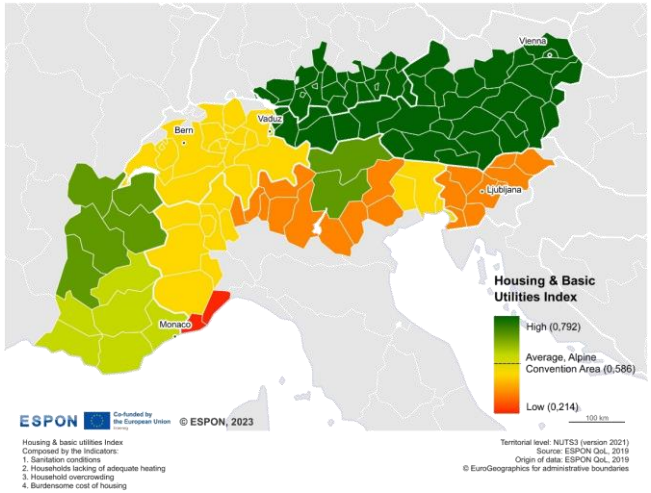
In relation to life flourishing, the regions with higher performance are concentrated in Switzerland, with Canton Ticino the only one in fully flourishing conditions and the other Swiss cantons scoring as moderately flourishing.

Most of the other Alpine regions exhibit average scores, especially in the eastern area and in the southern French Alps.

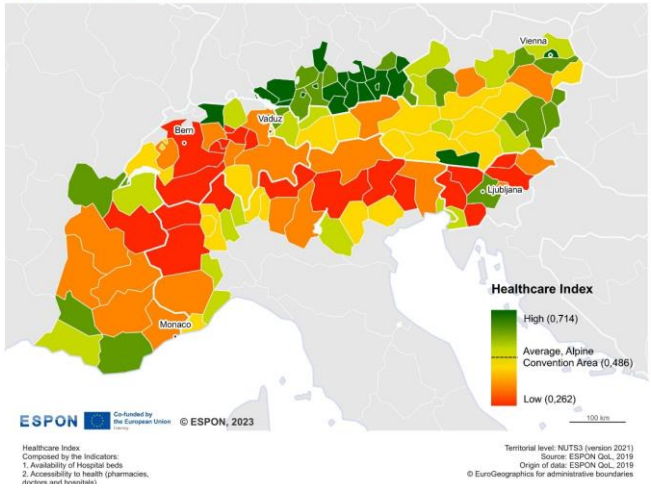
Finally, few regions in Italy and in the eastern parts of the Alpine area show challenging conditions.

Quality of Life indices – Personal sphere

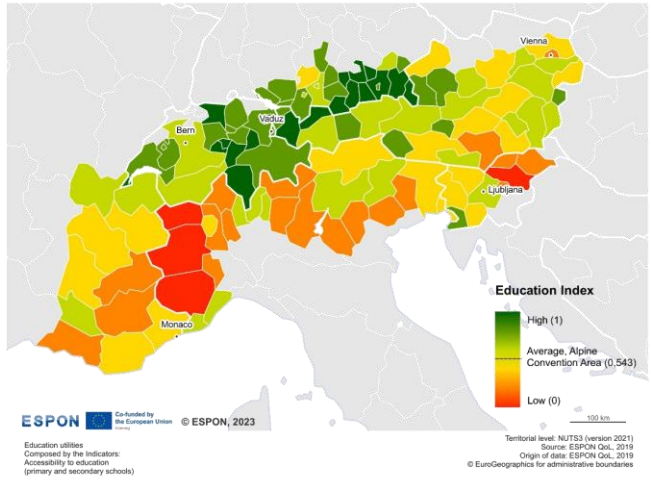
TQoL Index - Personal Enablers, Housing & Basic Utilities



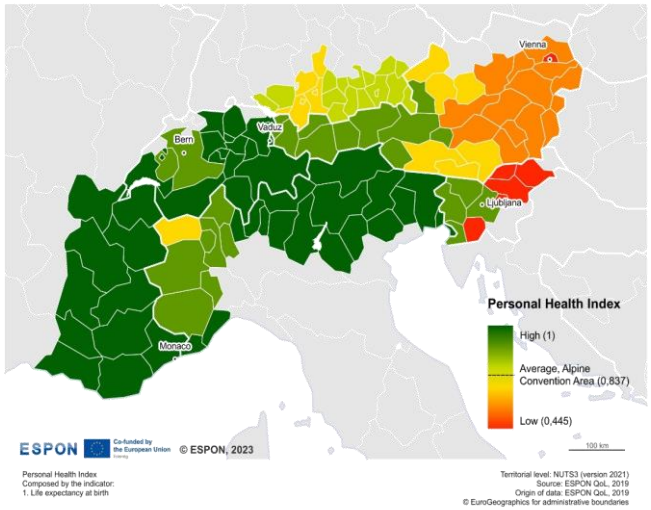
TQoL Index - Personal Enablers, Healthcare



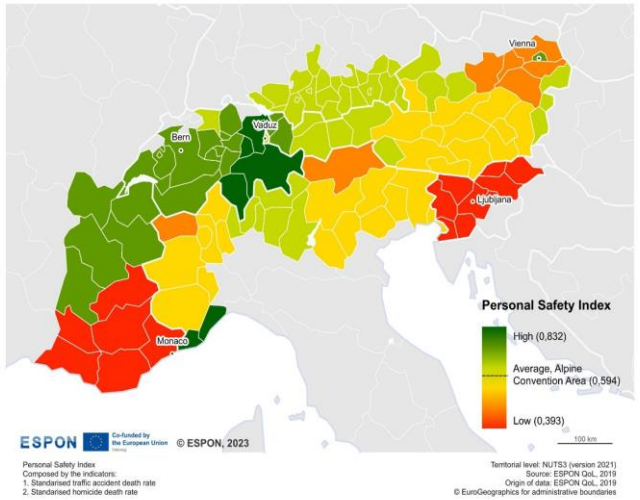
TQoL Index - Personal Enablers, Education



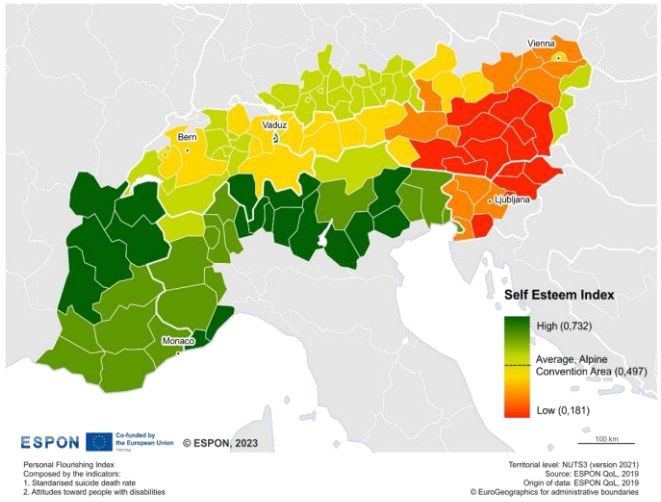
TQoL Index - Personal Health and Safety, Personal Health



TQoL Index - Personal Health and Safety, Personal Safety

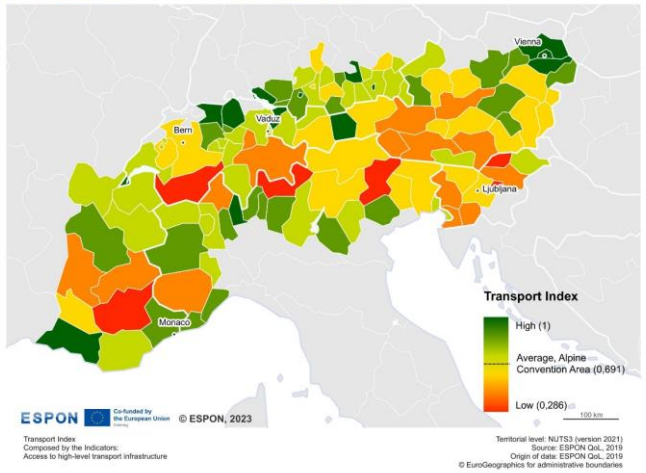


TQoL Index - Personal Flourishing, Self-Esteem

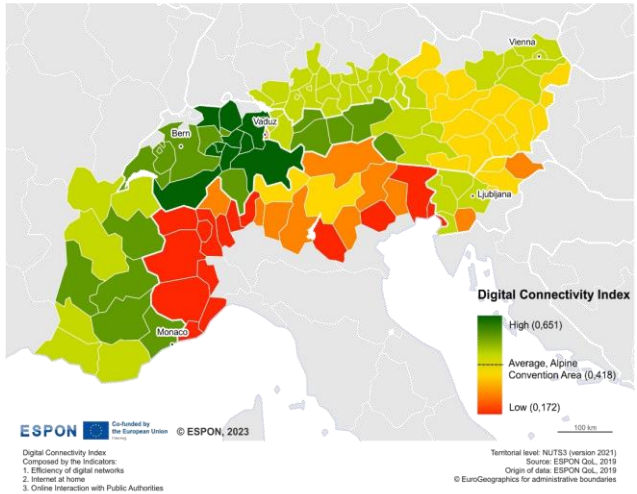


Good Life Enablers – Socio-economic sphere

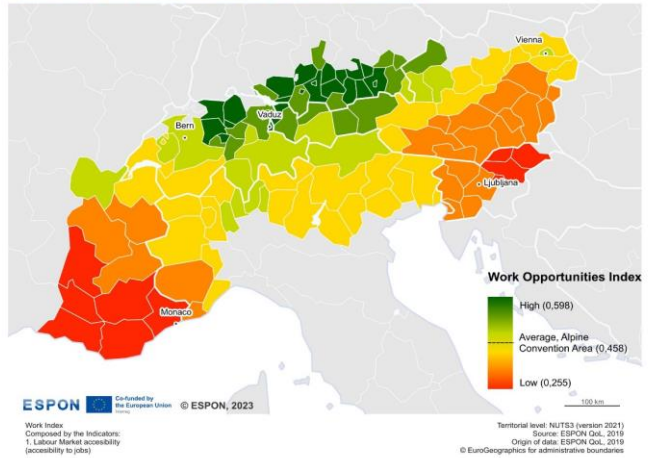
TQoL Index - Socioeconomic Enablers, Transport



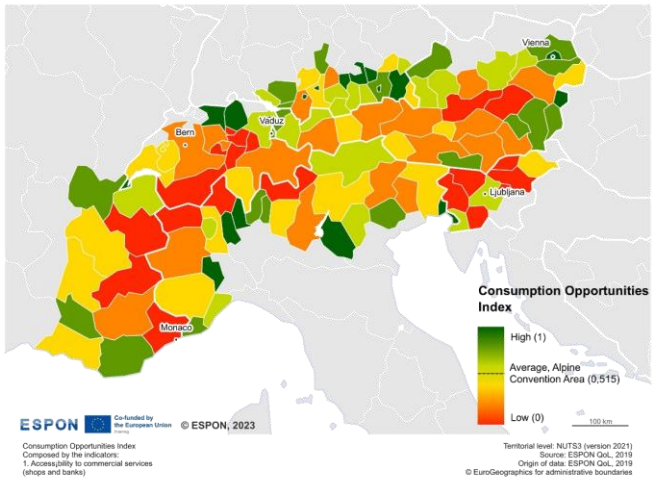
TQoL Index - Socioeconomic Enablers, Digital Connectivity



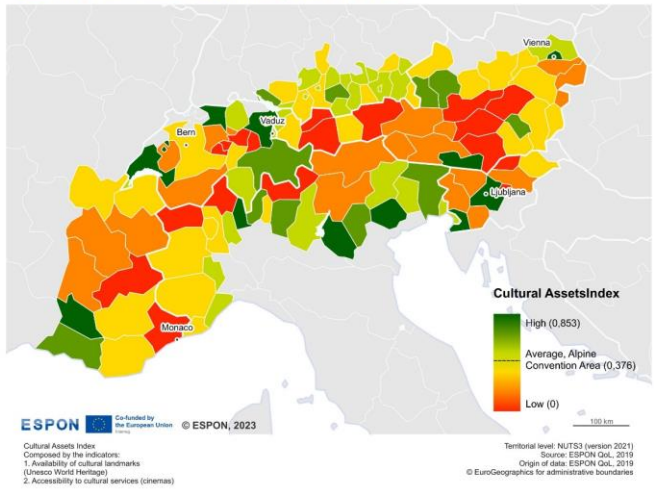
TQoL Index - Socioeconomic Enablers, Work Opportunities



TQoL Index - Socioeconomic Enablers, Consumption Opportunities

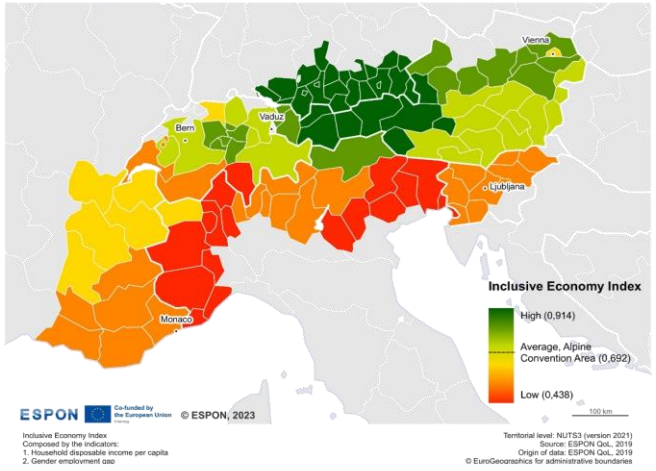


TQoL Index - Socioeconomic Enablers, Cultural Assets

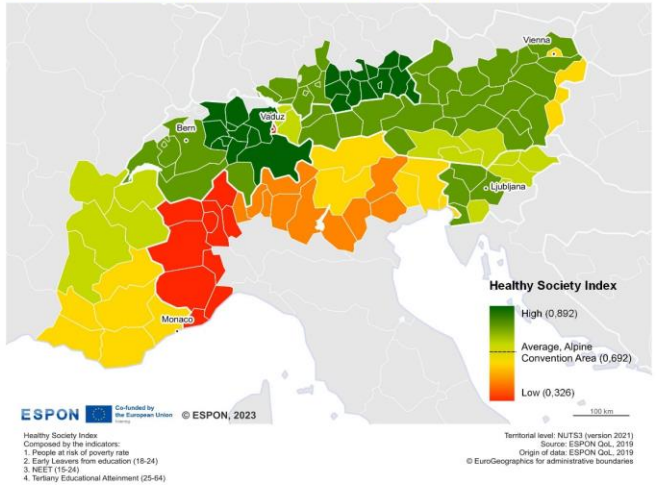


Life Maintenance & Flourishing – Socio-economic sphere

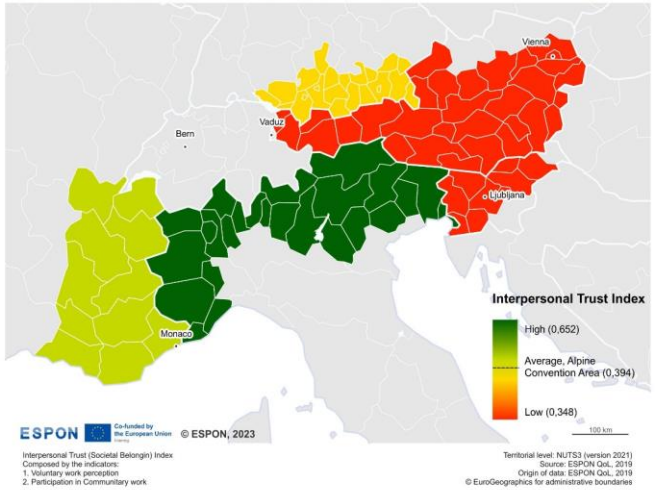
TQoL Index - Economic and Societal Health, Inclusive Economy



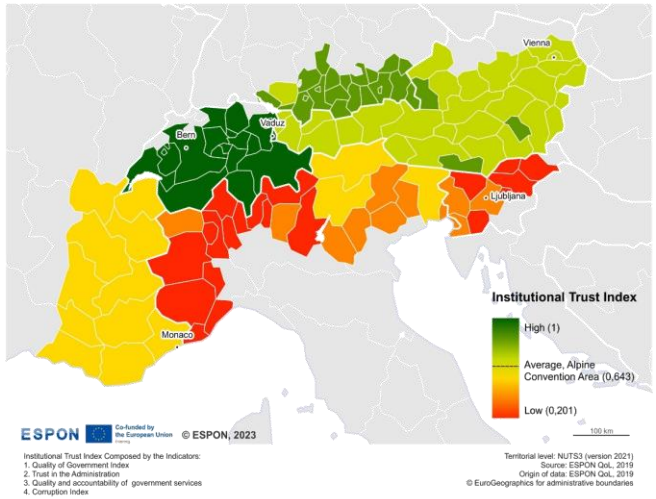
TQoL Index - Economic and Societal Health, Healthy Society



TQoL Index - Community Flourishing, Interpersonal trust

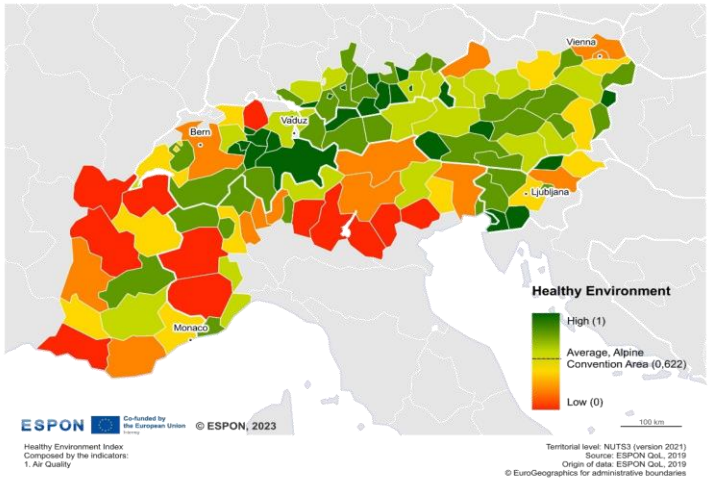


TQoL Index - Community Flourishing, Institutional Trust

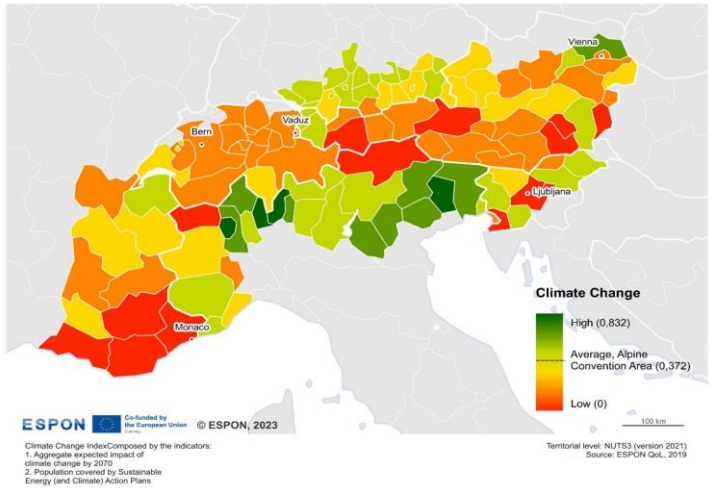


Quality of Life indices – Ecological sphere

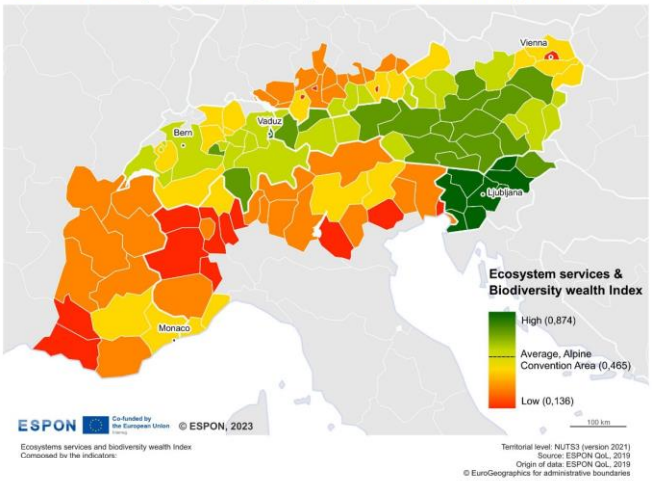
TQoL Index - Economic and Societal Health, Healthy Environment



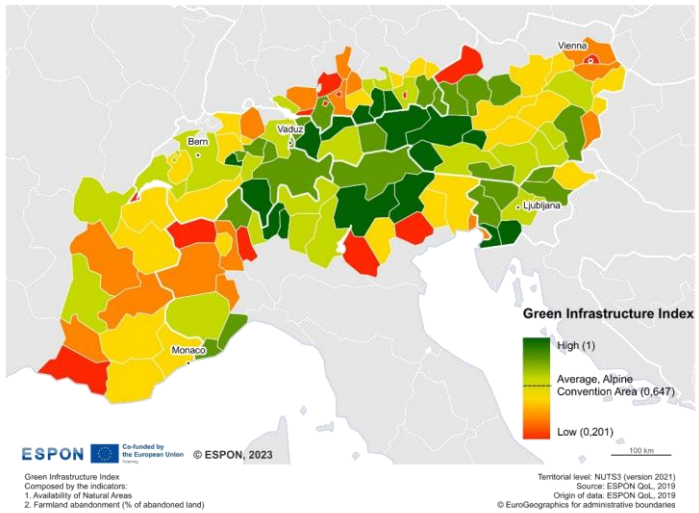
TQoL Index - Economic and Societal Health, Climate Change



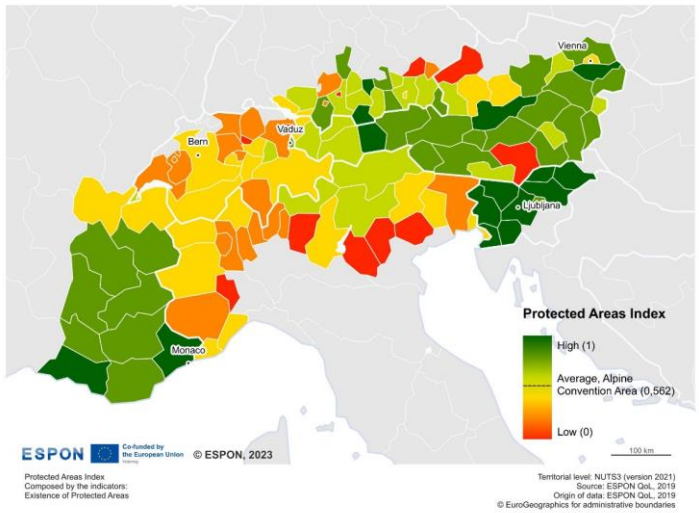
TQoL Index - Ecological Flourishing, Ecosystem services & Biodiversity wealth



TQoL Index - Ecological Enablers, Green Infrastructure

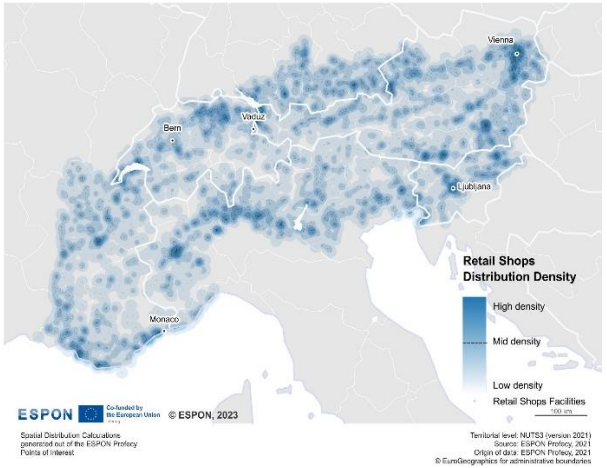


TQoL Index - Ecological Enablers, Protected Areas

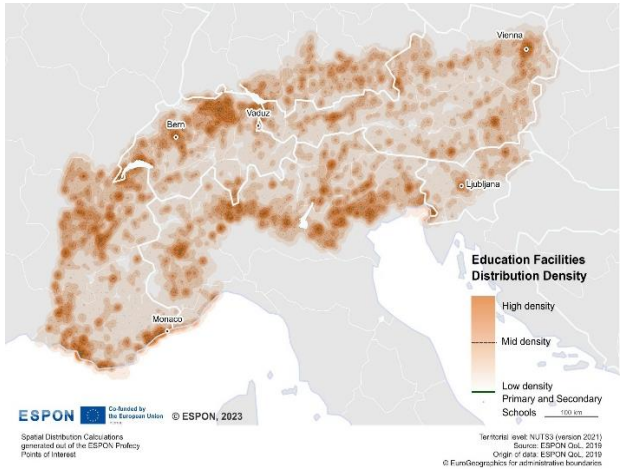


Services accessibility in the Alpine area (based on ESPON Profecy 2021 data)

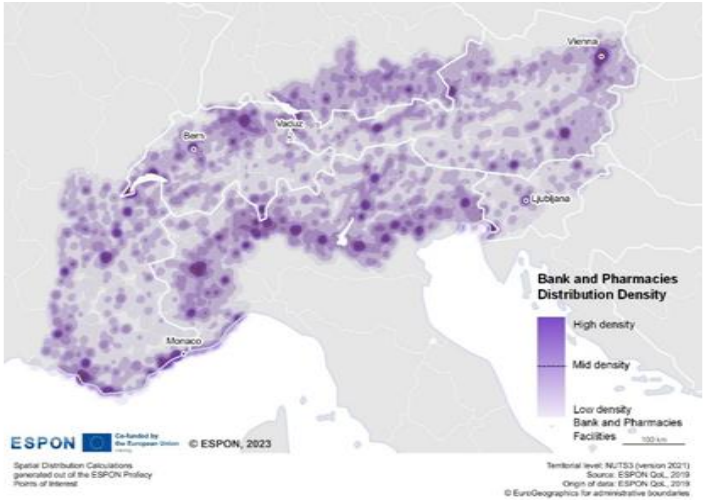
Accessibility to retail shops



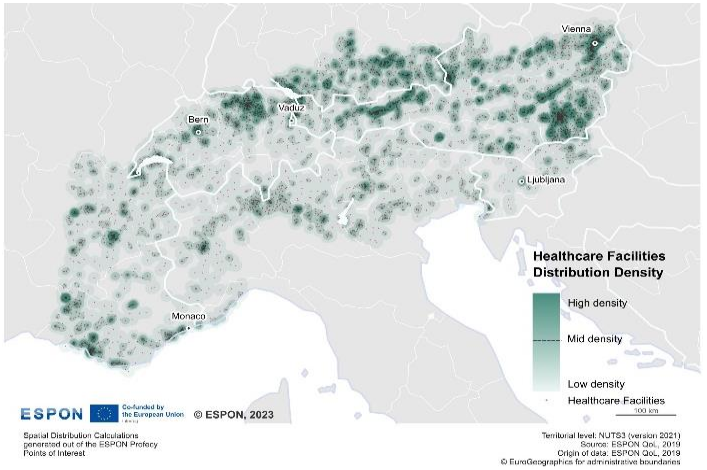
Accessibility to education



Accessibility to pharmacies and banks

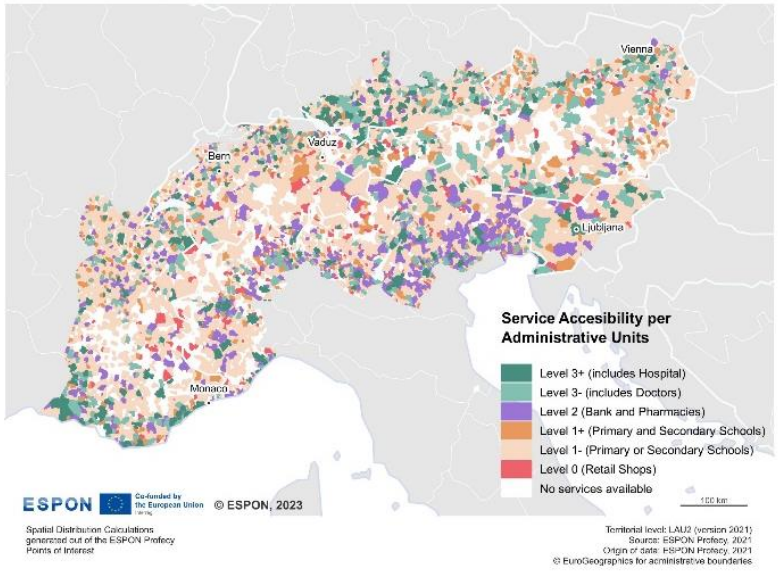


Accessibility to doctors and hospitals



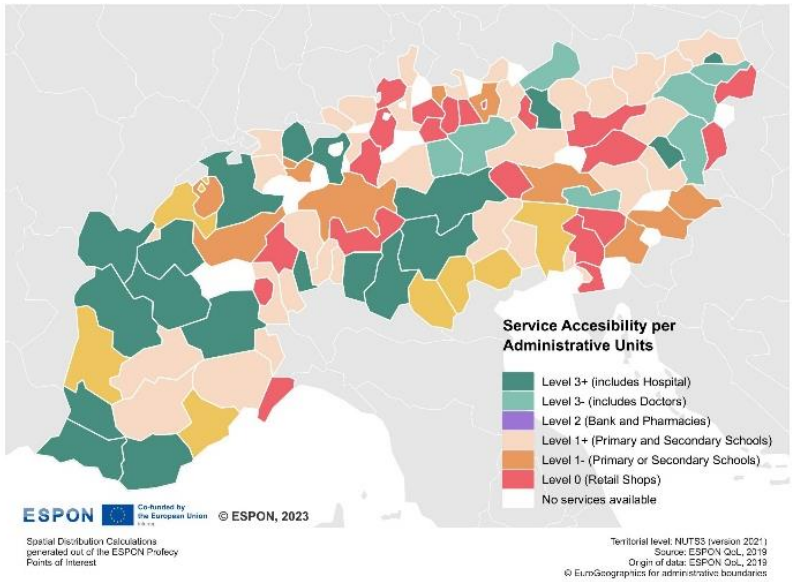
Services accessibility in the Alpine area (LAU2 and NUTS3 levels)

Analysis of Service Accessibility Levels – LAU2



- Most localities have access to education services (primary and secondary schools), showing a relatively uniform distribution of educational facilities.
- Central hub areas (highlighted in green) supply a more diverse range of services.
- Territorial poles (highlighted in purple) host banking and pharmaceutical services which support also adjacent regions.

Analysis of Service Accessibility Levels – NUTS3



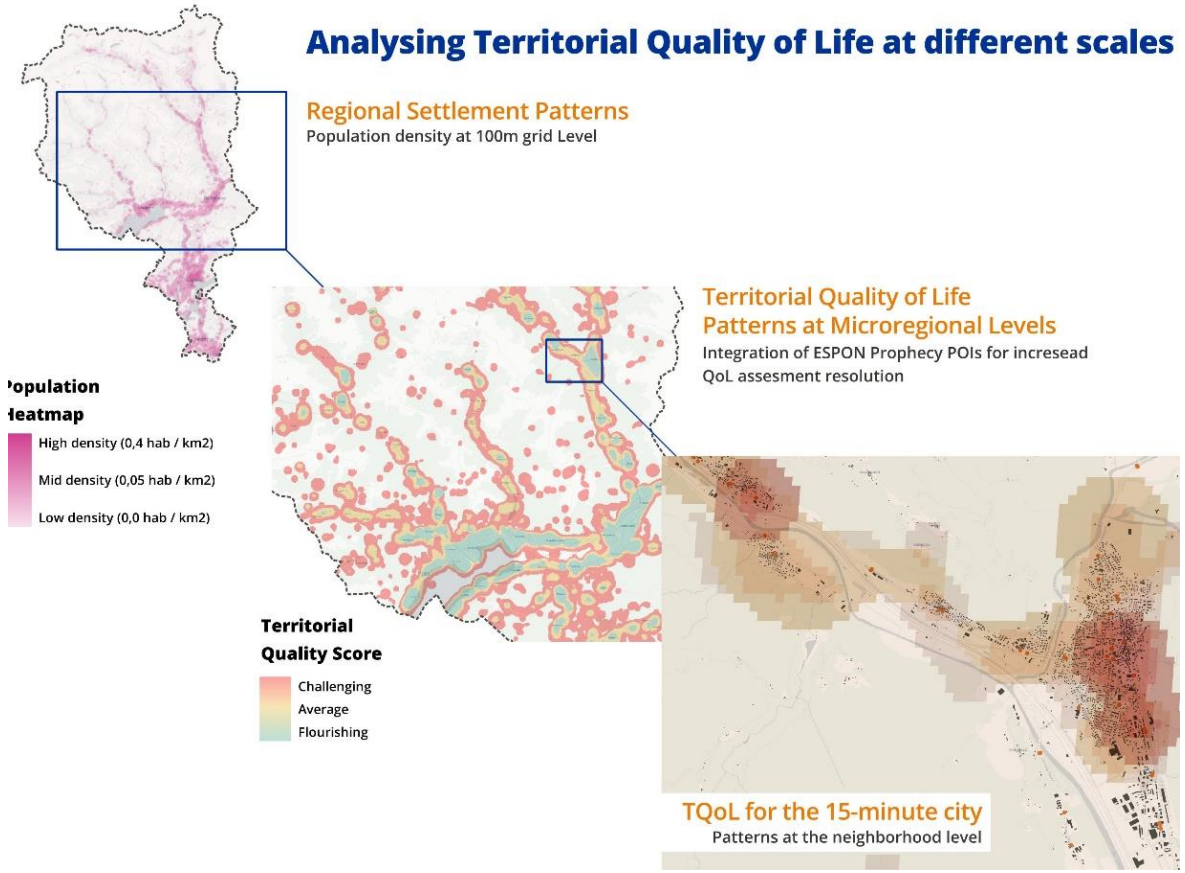
- The availability of basic services is obviously influenced by the population size of the NUTS3 region.
- Several NUTS3 regions of Austria and Slovenia show a lower service level, indicating potential challenges in accessibility or service.
- Conversely, in some NUTS3 regions of the central and western Alps there is a visible concentration of services.

Local scale application of the TQoL methodology

The **hectometric grid data** available for the whole Europe allow to 'geo-localise' the information about where people precisely live within the region – detecting resident population and housing in each cell – and to check the proximity of facilities which are key for people's everyday quality of living.

Data scraping methods are applied to produce 'heatmaps', i. e., to delimit the areas of accessibility of each and enumerate the associated housing and resident population living in each accessibility area.

A **partial TQoL score considering only the indicators of accessibility** to public transport and essential services available at spatial grid-level from the ESPON Profecy database 2021 is shown in the zoom image related to the Canton Ticino example.



Impact of global changes on Territorial Quality of Life

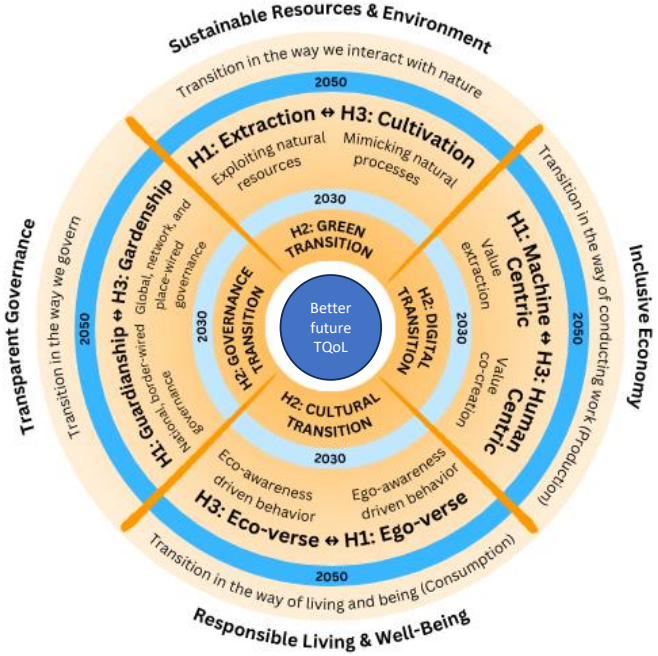
TQoL living labs have applied the Three Horizons method, augmented with a four transition scenarios meta-model, asking engaged data experts, stakeholders and citizens to envisage how quality of life may change by 2050, respectively

- in an **inertial scenario** (H1) where the current drivers and trends will continue unchanged
- in a **transformative scenario** (H3) where new emerging paradigms will become dominant
- **which quality of life aspects should be monitored as a priority** to be included in a territorial QoL policy agenda until 2030 (H2)

H1 INERTIAL scenario, where the system will stand in 2050 if current paradigms will remain dominant

H3 TRANSFORMATIVE scenario, how the system will look in 2050 if new emerging paradigms will become dominant

H2 Window of opportunity, what can be done until 2030 to facilitate the best future quality of life outcome



Who is it for?

Stakeholders and public engagement in envisioning ‘a better future territorial quality of life scenario’

How can we use the ESPON (place-based and citizen-centred) approach to measure QoL?

The TQoL framework and dashboard tool should be further developed in three directions:

1. To **reduce the gaps of territorially detailed data harmonised at European level,** by increasing the availability of geo-referenced information from EU databases, and harmonizing them (or at least establish equipollence) with geo-data available for Switzerland, Lichtenstein and Monaco, to get a wider range of granular TQoL indicators and maps, especially related to good life enablers and life maintenance indicators, valid for the whole Alpine area.

2. To **co-design and coordinate national quality of life surveys** with annual frequency and a sample sufficiently consistent and robust to support the computation of reliable indicators within the countries, at NUTS3 regions' level and for the sub-NUTS3 distinction of urban/peri-urban/rural areas, especially to measure life flourishing aspects. Coordinated surveys should allow to compute for the TQoL sub-domains the same or at least equipollent proxy indicators across all Alpine countries.

3. At local level (e.g., NUTS3 or city level), **connect TQoL framework applications engaging public statistical offices with business associations' Corporate Social Responsibility reporting** mechanisms (as suggested for the Canton Ticino and Trento cases).

How QoL is perceived in the different types of territories of the Alps?

- **Climate change certainly is perceived as having important impacts on the quality of life in the Alpine regions**, because of various threats caused by the rise in temperature and the frequency and intensity of extreme weather events. These include health impacts, unfavourable water cycle changes, air quality impacts, with ozone becoming the most relevant pollutant to monitor because of increasing temperature and nitrogen oxides becoming instead less relevant with the reduction of fossil fuels and transport emissions.

- **Population ageing – and in some Alpine regions also decline – presents several QoL implications and problems, especially for the healthcare and welfare service systems** increasingly challenged by constantly evolving social, organisational, and economic factors.

- **Globalisation impacts on local labour markets are perceived as highly problematic, especially by the younger generations** due to the unfavourable evolution of job opportunities, quality of work and wages that strongly influence their career and locational choices, combined with the increasing cost of living (and especially the difficulty to find affordable houses).

How QoL is perceived in the different types of territories of the Alps?

- Besides the impacts on labour markets, the **digital transformation will produce its most significant effects in the way in which the different actors of society interface and are connected to each other**. This will give rise to new lifestyles, behaviour and business models. The result of this change will presumably be defined by the capacity of all the actors involved (companies, public actors and users) to gain the most complete understanding possible of the digital transformation and become aware not only of the technological aspects but also of the social and cultural ones.

- **Artificial Intelligence is perceived not only as a risk factor, but as a much-needed aid, particularly the use of AI in healthcare**. It is not about replacing healthcare and welfare staffs but rather to assist them with support tools and technologies both in care facilities and at patients' homes. Similarly, **AI could be used to mitigate potential difficulties due to climate change**. A good quality of life should be also measured by the ability to embrace emerging technologies to free up space and time for citizens, increasing the efficiency of their activities.

Which territorial profiles can be identified at sub-national level? What similarities and differences can be identified within Alpine regions/territories?

- **Territorial QoL profiles can be best identified at sub-national level by using geo-referenced data** available from official sources (Eurostat, European Environmental Agency, national geo-data from Switzerland, Lichtenstein, Monaco), complemented with data scraping methods exploiting geo-localised open source information (Open Street Maps – OSM), to map the accessibility to consumption opportunities, education and health-care services, public transport infrastructure (rail and bus stations) at granular level – down to an hectometric grid of territorial cells covering the whole European space.
- The available granular accessibility data allow to **map the proximity to home of essential facilities** (e.g., within 400 metres or the equivalent of 15 minutes walking), which is one prerequisite for a good quality of life.
- The same approach could be **extended to include environmental variables, e.g., the presence of green areas, the exposure to air pollution sources, the quality of waters and soil**.

How Territorial Quality of Life living labs in the Alpine Convention area should be tested and further developed?

- Promote the use of the opportunities offered by the TQoL method for measuring quality of life in the regions, **more regional workshops** should be offered (e.g., by the programme committee introducing the programme and the project) to increase the level of information and knowledge. It would also be helpful if the regions and living labs involved in the project (in Austria, Italy, Slovenia, Switzerland) could continue to exchange ideas and learn from each other mutually in a **joint, transnational workshop**.

- To increase the usability and application of the ESPON TQoL-indicator set in the regions, it would be favourable if **the regions hear experiences and practical stories from other regions that already have more experiences in the application and use of this indicator set and measurement system** (e.g., usage of indicators, which information and planning needs and for which purpose, challenges of application, benefits).

How can citizens, community initiatives, associations, and public actors be involved?

- **Upscale the visibility of the TQoL living lab approach by promoting its implementation as an instance of 'framework for participation',** following the recent European Commission Recommendation (*), in the Alpine regions of the EU Member States, and promote covenants as well with Switzerland and the micro-states of Lichtenstein and Monaco for the same purpose.

- **This will help to strengthen citizens' empowering in the definition of quality of life indicators and deliberation of QoL policies** better aligned with their needs and expectations in the whole Alpine area, achieving a better balance between citizens, civil society and other government and business stakeholders contributions to the TQoL living lab processes.

(°) ***Commission Recommendation of 12.12.2023 on promoting the engagement and effective participation of citizens and civil society organisations in public policy-making processes***

How can citizens, community initiatives, associations, and public actors be involved?

To ensure an effective **multi-governance and multi-stakeholders' cooperation and involvement**, the suggested TQoL framework of participation should, amongst other things:

- **ensure participation on topics of public interest in a continuous and regular manner** and not only during electoral periods;
- **enable participation in the early stages of the policy-making processes**, in the identification of the needs, priorities and the definition of possible policy options, and regularly invite citizens and civil society organization to participate at follow-up monitoring stages of the policy process;
- **provide appropriate and necessary information** regarding a specific participation exercise in a timely manner and in easily accessible formats, including the context and the type of measures envisaged, the procedures, the timeline for participation, the authority responsible for the exercise and the widest possible access to information and to key documents both offline and online;
- **envisage sufficient resources and time to ensure meaningful impact**.

On this latter point, and with reference to the EU, we reiterate the recommendation (*) of asking Member States to dedicate **specific funding to support the implementation of the TQoL framework of participation at all levels of government**, including by making best use of available Union funds, e.g. setting up an **EU Research Mission** for this purpose.

(*) given at the end of a previous pilot ESPON QoL study focusing on the Slovenia, Croatia, Italy cross-border region.

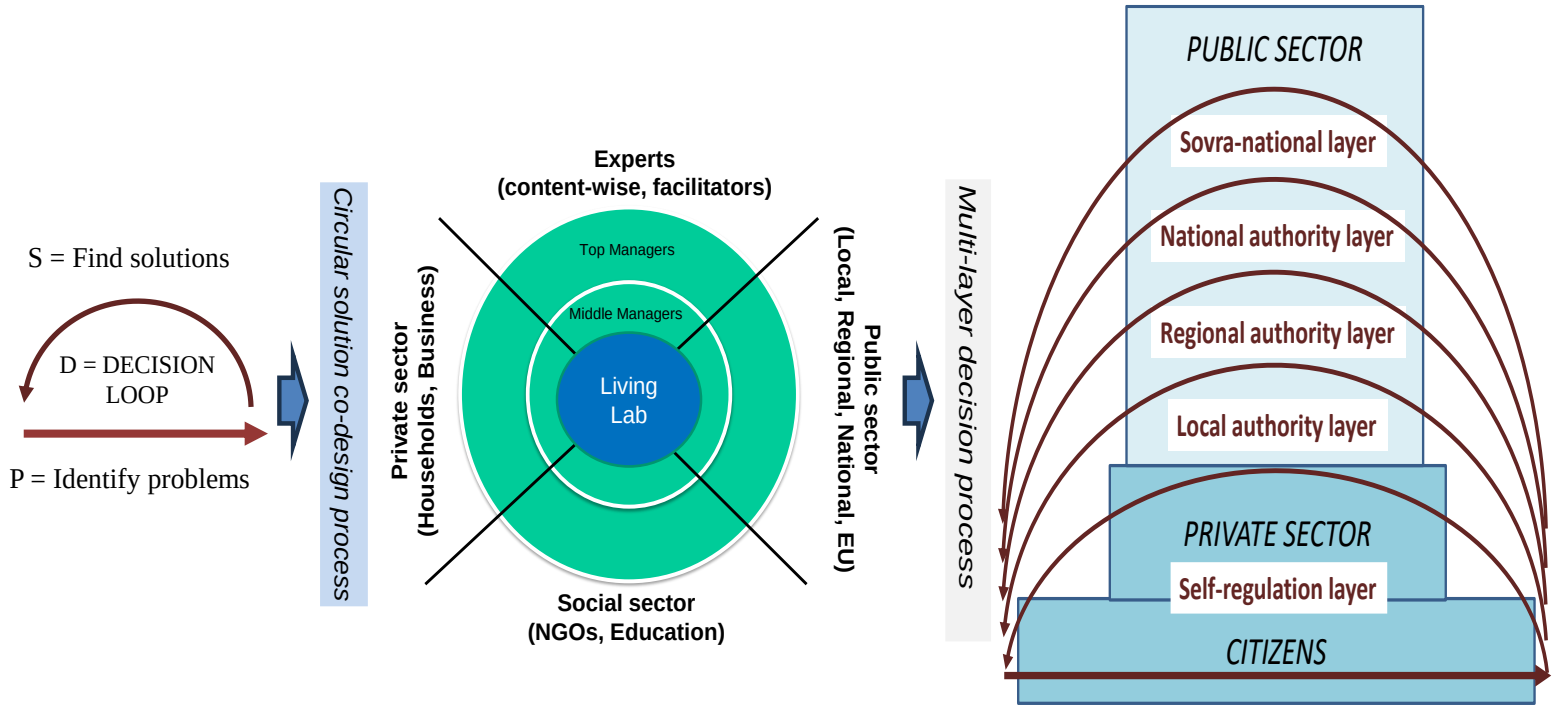
Multi-stakeholders and multi-governance model of policy co-creation

Policy making is represented on the left as a cycle starting with the identification of problems (P) which will require a decision loop (D) to find solutions (S).

Multi-layer governance is represented on the right as entailing decisions which, depending on complexity, may be taken directly by the citizens and/or business agents themselves (self-regulation layer) or require government decisions/regulations at the local, regional, national, or sovra-national governance layers (multi-lateral treaties, e.g. EU, or bilateral agreements).

In the middle the living lab approach enables a **multi-stakeholders co-design process** where all the relevant actors, from all decision levels, are represented and involved simultaneously (e.g,. in a workshop) to work out together solutions.

These solutions – the **living lab outcomes** – need then to be translated in decisions taken by responsible agents (managers, policy makers) in the multi-layer administrative machine, realising a transparent and effective implementation process.



Policy making cycle

Multi-stakeholders co-design

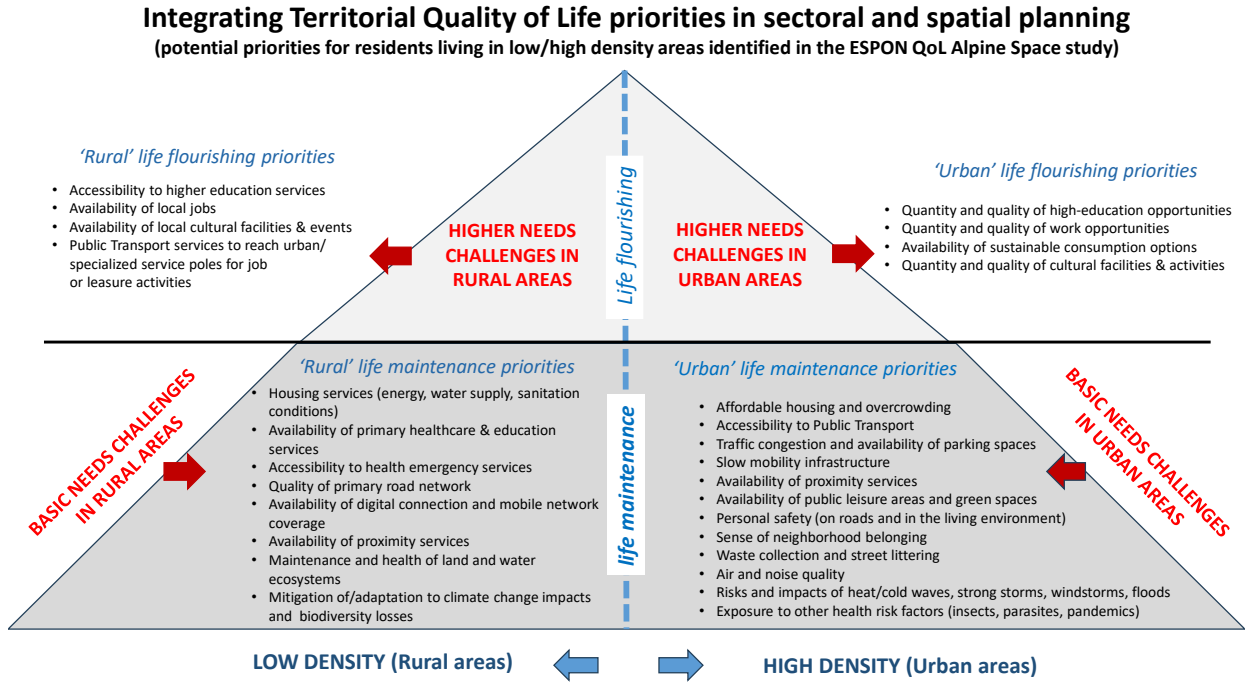
Multi-layer governance

Pyramid of urban and rural QoL priorities

The pyramid show the *basic* and *higher quality of life needs* of rural and urban residents, identified at the outset of the living labs' discussions and machine learning exploration of typical QoL conditions in low and high density areas.

Basic needs to be satisfied to ensure people quality of life maintenance are listed at the bottom of the pyramid. The QoL conditions they entail to be satisfied are different when living in low density (rural) and high density (urban) areas.

In the top of the pyramid, we represent **higher needs to be satisfied to ensure people quality of life flourishing**. Again, the QoL conditions they entail to be satisfied are different for rural and urban contexts



How can TQoL be integrated into spatial planning instruments/processes and sectorial policies in the Alpine Convention space?

- **Promote TQoL living labs as an experimental approach to participatory spatial planning**, making citizens and stakeholders more actively involved in spatial planning processes, by organizing systematically interviews, stakeholders' workshops and focus groups with balanced panels of randomly selected citizens, to discuss quality of life priorities, indicators and policies.

- The '**pyramid of urban and rural quality of life priorities**' could be used as a reference frame either:
  - to **identify specific quality of life priorities for sectorial plans** (e.g., by setting goals related to house affordability in urban housing policies) or
  - more broadly to **consider rural and urban quality of life priorities in spatial plans** aiming to balance the distribution of urban and rural functions and services within the regions.

- By acknowledging the diversity of climate change and digital transformation challenges and opportunities in high density (urban) and low density (rural) areas, and their possible impacts on QoL conditions**, regional spatial plans may contribute to create more attractive living environments both in the cities and in the countryside.**