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WORKING GROUP ON LANDSCAPE AND HEALTH

REPORT ON LANDSCAPE AND HEALTH

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Appendix 1: List of the Working group members

Appendix 2: List of participants in the Working group online meeting held on 9 September 2024

Appendix 3: Appendix V of the Reykjavík Declaration - The Council of Europe and the environment

Appendix 4: Proposed Recommendation of the Committee of Ministers to member States for the implementation of the Council of Europe Landscape Convention - Landscape and Health

1 Introduction

1.1 Context of the report

1. The Council of Europe Landscape Convention is based on the assumption that *'landscape is a key element of individual and social well-being everywhere, an essential component of human beings' surroundings and an important part of their quality of life.*¹ Its contribution also extends to the health field. However, relating human health directly to landscape has not yet been explicitly and thoroughly addressed. To fill this gap, the mandate of the Council of Europe's Committee for Culture, Heritage and Landscape (CDCPP) prescribes the drafting of a Recommendation of the Committee of Ministers, addressed to the member states, on 'Landscape and Health'. The relationship between landscape and health was highlighted during the 6th International Landscape Day on 20 October 2022, when the Strasbourg message 'Landscape and Health' was presented. It invited competent public authorities and local stakeholders to consider *'the importance of landscape on a global scale as an essential component of the living environment of human beings.'* This important message also links the objective of landscape and health to sustainable development and is now further reinforced by Reykjavík Declaration of May 2023 - Appendix V (cf paragraph 29 below and Appendix 3).

2. Based on this mandate, a preliminary draft report and some initial elements for the drafting of a recommendation were prepared during 2023 by Gilles Rudaz, President of the *Conference on the Council of Europe Landscape Convention*, in collaboration with Tijo Kallumkal, within the *Swiss Federal Office for the Environment (FOEN)*. The following Swiss experts were consulted at this stage: Nicole Bauer, Evelyn Coleman, Séverine Evéquoz, Martina Foehn, Franziska Grossenbacher, Gisèle Jungo, Sonja Kahlmeier, Jérémie Millot, Matthias StremLOW.

3. Subsequently, the **Working Group on 'Landscape and Health'**, established under the Council of Europe Landscape Convention (the list of Working group members is provided in Appendix 1) contributed to this work through an online meeting held on 9 September 2024 (the list of participants is provided in Appendix 2).

4. This document is the result of that work and consultation; it forms the basis of the proposed recommendation of the Committee of Ministers of the Council of Europe on Landscape and Health, presented in Appendix 4.

1.2 Healthy people in healthy landscapes

5. A healthy environment contributes to and helps to sustain a healthy population. The WHO World Health Statistics considers that "24 % of all estimated global deaths are linked to the environment" (SDG Target 3.9 Mortality from environmental pollution) (World Health Organization, 2016). Human health and well-being depend on environmental quality (United Nations Environment Programme, 2016). Whether it's the food and water we consume, the air we breathe or the surrounding biodiversity and landscapes – they all impact our well-being. As will be seen in the next chapter, the Council of Europe has identified health as a human rights issue, as in Recommendation 2211(2021) of the Parliamentary Assembly "Anchoring the right to a healthy environment: need for enhanced action by the Council of Europe", and in Recommendation 2272 (2024) "Mainstreaming the human right to a safe, clean, healthy and sustainable environment with the Reykjavík process".

6. But it is not just a question of avoiding health problems related to environmental risks. Environmental qualities play a key role in promoting health. In this context, the landscape represents a prime opportunity to address this issue. Although the term "health" does not appear *per se* in the text of the Council of Europe Landscape Convention, the connections between landscape and health are quite obvious and are implicit in the Convention. Indeed, one of the central inputs of the Convention has been to highlight the essential contributions that landscape, in all its forms, offers to citizens for their well-being and their quality of life. The quality of the landscape - conceived as the "surroundings where people live"¹ - "is recognised as a precondition for individual and social well-being (understood in the

¹ Sixth International Landscape Day of the Council of Europe, 20 October 2022

physical, physiological, psychological and intellectual sense)”². A quality landscape makes an undeniable contribution to health.

7. This report aims to identify, on the one hand, the prerequisites and, on the other hand, the links and synergies between the two topics, health and landscape, which can lead to mutually constructive positive effects. It shows that the quality of the landscape contributes to well-being and health, both physical and mental, of those who perceive and experience it. In contrast, it stresses how degradation, impoverishment and standardisation of the landscape are detrimental to the well-being and health of people. It also highlights how landscape qualities can provide answers to the planet's triple crisis of pollution, climate change and loss of biodiversity. The report presents and highlights the deep connection between landscape and health.

8. The report is structured as follows. After clarifying the Council of Europe's legal framework on the subject, including the most recent human rights jurisprudence, it offers some conceptual insights on the topic. It also proposes a review of the relevant scientific literature. A specific chapter is devoted to the need to preserve and develop spaces that make a positive contribution to health, and highlights the central role played by spatial planning and landscape architecture. The report concludes by emphasising the importance of promoting a positive interaction between landscape and health, which could help the public authorities concerned to adopt, where appropriate, policies or measures that strengthen this interaction in the interests of their populations.

2 The Council of Europe's growing commitment to strengthen the link between landscape and health³

2.1 The Council of Europe Landscape Convention: a fundamental normative reference

9. The member States of the Council of Europe signatories to the Convention clearly stated that: they are *concerned to achieve sustainable development based on a balanced and harmonious relationship between social needs, economic activity and the environment*; and that the landscape: *has an important public interest role in the cultural, ecological, environmental and social fields; is a basic component of the European natural and cultural heritage, contributing to human well-being; is an essential component of human being's surroundings; is an important part of the quality of life for people everywhere: in urban areas and in the countryside, in degraded areas as well as in areas of high quality, in areas recognised as being of outstanding beauty as well as everyday areas; is a key element of individual and social well-being and that its protection, management and planning entail rights and responsibilities for everyone* (cf. Preamble of the Convention).

10. Each Party to the Landscape Convention undertakes inter alia to *recognise landscapes in law as an essential component of people surroundings* (Article 5.a), and to *integrate landscape into its regional and town planning policies and in its cultural, environmental, agricultural, social and economic policies, as well as in any other policies with possible direct or indirect impact on landscape* (Article 5.d).

11. These principles have been taken up, explained, and expanded in numerous Recommendations of the Committee of Ministers on the Landscape Convention addressed to member States, in particular:

- Recommendation CM/Rec(2008)3 on the guidelines for the implementation of the European Landscape Convention: these guidelines state that the concept of landscape expresses *the desire to*

² Council of Europe - Recommendation CM/Rec(2008)3 of the Committee of Ministers to member States on the guidelines for the implementation of the European Landscape Convention.

³ This section focuses on the decisions and instruments of the Council of Europe. However, other bodies have also addressed the issue. Thus, on 28 July 2022, the United Nations General Assembly adopted a landmark resolution declaring that access to a clean, healthy and sustainable environment is a universal human right (United Nations General Assembly, 2022). This resolution of the General Assembly was drafted on the basis of a resolution adopted on 8 October 2021 by the United Nations Human Rights Council to implement the right to a safe, clean, healthy and sustainable environment (United Nations Human Rights Council, 2018). A healthy environment is considered a prerequisite for the exercise of human rights. (Aarhus convention 1998 of the UNECE also providing access to environmental data and the right to participative processes for citizens on environmental issues.

confront, head-on and in a comprehensive way, the theme of the quality of the surroundings where people live; this is recognised as a precondition for individual and social well-being (understood in the physical, physiological, psychological and intellectual sense) and for sustainable development, as well as a resource conducive to economic activity (cf. Guidelines for the implementation of the European Landscape Convention, chapter I.2 - Definition of landscape).

- Recommendation CM/Rec(2017)7 on the contribution of the European Landscape Convention to the exercise of human rights and democracy with a view to sustainable development: States are urged to *consider the importance that quality and diversity of landscapes has for the minds and bodies of human beings, as well as for societies, in the reflections and work devoted to human rights and democracy, with a view to sustainable development (cf. Preamble and recommendation a).*
- Recommendation CM/Rec(2021)9 on landscape and responsibility of stakeholders for sustainable and harmonious development: States are urged to *make use of landscape policies in public policies that have a direct and indirect impact on the landscape. It is specified in the text that this applies inter alia to health policies (cf. Preamble and recommendation 1.b).*
- Recommendation CM/Rec(2021)12 on Integration of the landscape dimension into sectoral policies: the need to *ensure the quality and diversity of landscapes in relation to health* is explicitly emphasised. States are requested to *ensure that health policies, among others, take into consideration the values and functions of the landscape (cf. Preamble and recommendation 2).*

12. Resolution CM/Res(2008)3 adopted by the Committee of Ministers in 2008 allows the Council of Europe Landscape Convention to organise a biennial ‘Landscape Award’, now known as the Landscape Award Alliance’ to gather together exemplary projects presented by States Parties to the Convention. These demonstrate how it is possible to promote the territorial dimension of human rights and democracy by improving the landscape features of people’s surroundings. These exemplify many projects which benefit from extensive public participation, improving access to green spaces, revalorising historical, cultural and natural heritage, providing blue/green networks in sustainable landscapes in a variety of urban, peri-urban and rural contexts, contributing greatly to the health of the local population.

2.2 The relationship between landscape and human rights in jurisprudence

13. While the European Convention on Human Rights (ECHR) does not set out a specific right to health or to a healthy environment, the right to health is specifically established by the European Social Charter (ESC), Article 11. In this context, as regards the relationship between the right to health and the environment reference should be made to the case law of the European Committee of Social Rights (ECSR): notably Complaint No. 30/2004, Marangopoulos Foundation for Human Rights v. Greece, 6 December 2006; Complaint No. 72/2011 International Federation for Human Rights (FIDH) v. Greece, 23 January 2013. In its decision concerning Complaint No. 30/2004, the ECSR has explicitly interpreted Article 11 as including the right to a healthy environment. However, the ECSR has never yet established an explicit link between the right to health and landscape, or even to a healthy landscape. Therefore, in view of Article 11, there appears to be a need to further ensure the effective exercise of the right to protection of health, by undertaking, either directly, or in cooperation with public or private organisations, appropriate measures designed inter alia: to remove as far as possible the causes of ill-health; to provide advisory and educational facilities for the promotion of health and the encouragement of individual responsibility in matters of health; to prevent as far as possible epidemic, endemic and other diseases, as well as accidents. Attention to providing quality landscapes, access to green spaces, blue/green corridors, and traffic free areas can contribute hugely to this.

14. Even though the ECHR does not enshrine any right to a healthy environment as such, the European Court of Human Rights (hereafter: the Court) has been called upon to develop its case-law in environmental matters on account of the fact that the exercise of certain Convention rights may be undermined by the existence of harm to the environment and exposure to environmental risks. However, with reference to the ECHR, the landscape is rarely a cause of action and when it is, it is invariably

linked to issues relating to the environment. There are zero references to the Landscape Convention in the Court's case-law.

15. As indicated in the Council of Europe's conceptual report on Landscape and the contribution of the European Landscape Convention to democracy, human rights and sustainable development of 31 March 2017, since 9 December 1994 and the judgment in *López-Ostra v. Spain* (Application No. 16798/90), the Court has recognised that, by extension, damage caused to the environment and hence also to its component parts, such as landscape, may amount to a violation of certain human rights expressly enshrined in the ECHR. This is the case when the environmental violation is deemed to also constitute a violation of the right to life (Article 2), or a violation of the right to respect for private and family life, and for the home (Article 8).

16. In the judgment of 1994, the Court held that: "*severe environmental pollution may affect individuals' well-being and prevent them from enjoying their homes in such a way as to affect their private and family life adversely*". The reference to individuals' well-being, which is not even mentioned in Article 8, thus suggests that, in the view of the Court, well-being is a value worth protecting, which is precisely what the Landscape Convention does.

17. Recognition of the right to a healthy environment as a new human right gained further support with the judgment in *Tatar v. Romania* of 27 January 2009 (Application No. 67021/01) which likewise made a connection between Article 8 and the right to "*enjoyment of a healthy, protected environment*". Once again, a parallel can be drawn with the Landscape Convention, which refers to the right to enjoy high quality landscapes.

18. In *Kyrtatos v. Greece* of 22 May 2003 (Application No. 41666/98) the applicants, who "own real property in the south-eastern part of the Greek island of Tinos" claimed that "*the area has lost all of its scenic beauty and its character has changed profoundly from that of a natural habitat for wildlife to a tourist development...*". The Court made it quite clear that urban development which was detrimental to the environment and neighbouring countryside could not be a ground for complaint under Article 8 unless the interference directly affected the applicant's home or private life (see also *Ogloblina v. Russia* (dec.), Application No. 28852/05, 26 November 2013 about local deforestation). The judgment itself, though, suggests that damage to the surroundings situated outside the applicant's property could, in other circumstances, amount to a violation of Article 8, paragraph 1: "*It might have been otherwise if, for instance, the environmental deterioration complained of had consisted in the destruction of a forest area in the vicinity of the applicants' house, a situation which could have affected more directly the applicants' own well-being*" (paragraph 53). In other words, the well-being attached to the home is clearly conditioned by the surrounding area affording a certain quality of environment, and hence a certain quality of life of which landscape is an integral part.

19. Well-being can also affect people outside their homes, however, as in the case of *Di Sarno v. Italy* of 10 January 2012, Application No. 30765/08) involving the piling-up of rubbish in the streets. The Court ruled that the environmental pollution complained of "*may affect individuals' well-being*" (paragraphs 81 and 104). The polluted environment in this instance also referred to "countryside", with the Court citing the European Directive 2006/12 of 5 April 2006 on waste, Article 4(1)(c) of which mentions the possibility of poor waste management "*adversely affecting the countryside*".

20. Shortly before that, the Court of Justice of the European Union had found Italy to be in breach of the directive, the Commission having alleged that there had been "significant degradation of the environment and the landscape" (CJEU, *Commission v. Italy*, 4 March 2010, C/297/08, paragraph 90). The Court found that "*given the lack of availability of sufficient landfills, the presence of such quantities of waste outside appropriate, approved storage facilities is likely to affect 'adversely ... the countryside or places of special interest'*". The case continued, with Italy being ordered to pay 20 million euros for persistent waste management failures in the Campania region and for failing to execute the judgment of 4 March 2010 (CJEU, 16 July 2015, case C. 653/13, paragraph 107).

21. In *Plačta and Others v. Poland*, judgment of 25 November 2014 (Applications Nos. 25194/08, 33710/08, 43494/08, 52276/08) the Court ruled that severe damage to the natural environment could potentially affect "individuals' well-being, preventing them from enjoying their homes" (paragraph 77).

So provided, it can be shown that damage to the landscape amounts to a sufficiently serious attack on individual well-being, such damage could warrant a finding of a violation of either Article 8 or Article 1 of Protocol No. 1.

22. In an earlier judgment, *Fadeyeva v. Russia* of 9 June 2005 (Application no. 55723/00), the Court concluded that environmental nuisance could potentially have an effect on the victims' mental health (paragraph 69. See also *Dubetska v. Ukraine* of 10 February 2011, Application No. 30499/03, paragraph 105).

In this regard, however, it should be noted that under the ECHR any detriment that is “*negligible in comparison to the environmental hazards inherent in life in every modern city*”, in principle, falls below the minimum severity threshold necessary for the applicability of Article 8. As a result, negative environmental impacts occurring in urbanised, industrialised, or otherwise degraded areas may escape the Court's scrutiny (see also *Apanasewicz v. Poland*, no. 6854/07, § 96, 3 May 2011; *Marchiş and Others v. Romania* (dec.), Application No. 38197/03, 28 June 2011; *Jugheli and Others v. Georgia*, Application No. 38342/05, § 62, 13 July 2017).

The Court may in the future want to take into consideration that the Landscape Convention requires landscape quality objectives to be set with reference to the whole territory, including degraded urban and industrialised areas as well as for all terrestrial areas, inland waters and marine waters.

23. In addition to Article 8, the Court's jurisprudence contains other significant references to the protection of the environment, including the landscape dimension, in the context of the property right enshrined in Article 1 of Protocol No. 1. The relevant case law refers to the need to protect nature, coasts, forests, dunes, peat bogs and other environmentally protected areas (see *Papastavrou and Others v. Greece*, Application No. 46372/99, ECHR 2003-IV; *N.A. and Others v. Turkey*, no. 37451/97, ECHR 2005-X; *Hamer v. Belgium* of 27 February 2008, - Application no. 21861/03, (n 25) § 79; *Pindstrup Mosebrug A/S v. Denmark* (dec.), Application No. 34943/06, 3 June 2008; *Depalle v. France* [GC], no. 34044/02, ECHR-2010; *Paratheristikos Oikodomikos Synetairismos Stegaseos Ypallilon Trapezis Tis Ellados v. Greece*, Application No. 2998/08, 3 May 2011; *Annika Jacobson v. Sweden* (dec.), Application No. 59122/08, 22 May 2012; *Valle Pierimpiè Società Agricola S.P.A v. Italy*, Application No. 46154/11, 23 September 2014; *Fredin v. Sweden* (no. 1) of 18 February 1991, Application no. 12033/86; *Pindstrup Mosebrug A/S v. Denmark* (dec.), Application No. 34943/06, 3 June 2008; *O'Sullivan McCarthy Mussel Development Ltd v. Ireland*, Application No. 44460/16, 7 June 2018; *G.I.E.M. S.r.l. and Others v. Italy* [GC], Applications Nos. 1828/06 and 2 others, § 302, 28 June 2018; *S.C. Fiercolect Impex S.R.L. v. Romania*, Application No. 26429/07, § 65, 13 December 2016).

In this context, the Court specifically ruled that “*Article 1 of Protocol No. 1 does not, in principle, guarantee a right to the peaceful enjoyment of possessions in a pleasant environment*” (*Ünver v. Turkey*, Application No. 36209/97 (First Section) – Decision of 26 September 2000).

24. Possibly with the intention of reinforcing these jurisprudential trends, the Committee of Ministers of the Council of Europe addressed in 2022 Recommendation CM/Rec(2022)20 on human rights and the protection of the environment to member States. In this document, the Committee of Ministers called on the States to actively consider recognising the right to a clean, healthy and sustainable environment as a human right at national level. In this connection, it recalled the existing standards contained, inter alia, in the ECHR, the ESC and their interpretation, respectively, by the Court and the ECSR, in the field of human rights and the environment. Having in mind the current environmental situation, the Committee of Ministers also specified that the Convention and the Charter are living instruments which must be interpreted in the light of present-day conditions.

25. This subchapter cannot be concluded without a reference to more recent environmental Court rulings on violations of fundamental rights caused by the effects of climate change. In this respect, in *Verein KlimaSeniorinnen Schweiz and Others v. Switzerland* of 9 April 2024, the Court found that there was a violation of the right to respect for private and family life (Article 8), as this right includes the right to effective protection by state authorities from the serious adverse effects of climate change on life, health, well-being and quality of life.

2.3 Towards the recognition of a fundamental right to a “healthy landscape”

26. The Council of Europe's focus on these issues increased further the following year at the 4th Summit of Heads of State and Government (Reykjavik, 16-17 May 2023). On this occasion, the leaders of the 46 Member States stated that *human rights and the environment are intertwined and that a clean, healthy and sustainable environment is integral to the full enjoyment of human rights by present and future generations*. They noted that *the right to a healthy environment is enshrined in various ways in several constitutions of the Council of Europe member States and the increased recognition of the right to a clean, healthy and sustainable environment in, inter alia, international instruments, regional human rights instruments, national constitutions, legislation and policies*.

27. With this in mind, they *reaffirmed their full commitment to the protection and implementation of social rights as guaranteed by the European Social Charter system; and recalled the extensive case law and practice on environment and human rights developed by the European Court of Human Rights and the European Committee of Social Rights*.

28. More generally, they *underscored the role that the Council of Europe may play as an Organisation working not only in the area of human rights, democracy and the rule of law, but with a long-standing and widely acknowledged track record in protecting the environment, environmentally friendly landscape management and public health*.

29. As regards landscape, the Heads of State and Government specifically referred in Reykjavik to *the Council of Europe Landscape Convention – the first international treaty devoted exclusively to all dimensions of the landscape*. They recalled that this treaty specifies that *the landscape has an important public interest role in the cultural, ecological, environmental, and social fields and is a key element of individual and social well-being, and that landscape protection, management and planning entail rights and responsibilities for everyone* (cf. Reykjavik Declaration - United around our values, Appendix V - *The Council of Europe and the environment* – the full text of the Declaration can be found in Appendix 2 of this report). These considerations are particularly urgent in the context of the triple planetary crisis of pollution, loss of biodiversity and climate change, all of which are interconnected with the health of our landscapes. The WHO One health Initiative further reinforces the idea that human health, environmental sustainability, and ecosystem integrity are intertwined, emphasizing that the degradation of landscapes directly affects human health.

3 Conceptual perspective on the link between landscape and health

30. This chapter highlights the connection between health and landscape. It begins by clarifying the terminology, followed by a discussion that explores the various positive influences landscapes have on human physical, mental and social health, as well as cultural heritage. It then examines the economic benefits that healthy landscapes provide by reducing healthcare costs and promoting sustainable development. Finally, the chapter emphasizes the importance of interdisciplinary expertise in ensuring the successful planning, development and management of healthy landscapes.

3.1 Definition of landscape and health

31. Landscape encompasses all space as perceived and experienced by people. It includes land and water (inland and seas), as well as natural, rural, urban and peri-urban areas. It does not only concern the areas of exceptional beauty but any areas, including degraded areas. A major contribution of the Council of Europe Landscape Convention was the introduction of the notion of everyday landscape or ordinary landscape, which refers to the living environment of populations. Every landscape, at all scales, provides a setting for living and the quality of these landscapes has a direct effect on the quality of life. Urban and peri-urban landscapes are particularly important as everyday landscapes encompassing a wide variety of green spaces.

Landscape

"'Landscape' means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors." (Council of Europe, 2000)

32. The WHO defines health by stressing the correlation between the physical health, mental health and social well-being (see Fig. 1). Physical health is mainly affected by diseases and disability. Certain landscape services, especially those related to the green space qualities and benefits, can contribute to the prevention of diseases. Awareness of the importance of green spaces and contact with nature for human health was already recognised in the 19th century (WHO Regional Office for Europe, 2016). People who suffer greatly in everyday life due to stress or depression, can strengthen their mental health through the positive influence of the everyday contact with nature provided by public green spaces and gardens and specially designed therapeutic landscapes. Social isolation or the lack of rest or retreat can negatively influence social well-being. “Movement spaces” and “encounter spaces”⁴ help to counteract these effects.

Health
 "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."
 (World Health Organization, 1946)

33. Human health depends on a multitude of influences (see Fig. 2). The basis is formed by individual factors such as age, gender and constitutional factors. A further influence is formed by numerous framework conditions of social and community networks as well as socio-economic, cultural and environmental conditions (Dahlgren et al., 1991).

34. This multidimensionality of health calls for a holistic approach, which for instance the One Health approach or the concept of Planetary Health aim to promote (see chap. 4.5). One Health is an integrative and unifying approach that aims to sustainably optimise the health of humans, animals and ecosystems. It is based on the realisation that the maintenance of health cannot be limited to humans and animals but must include all living organisms in given ecosystems (WHO, One Health). Planetary Health focuses on the health of the entire ecosystem. The basic principle is to ensure

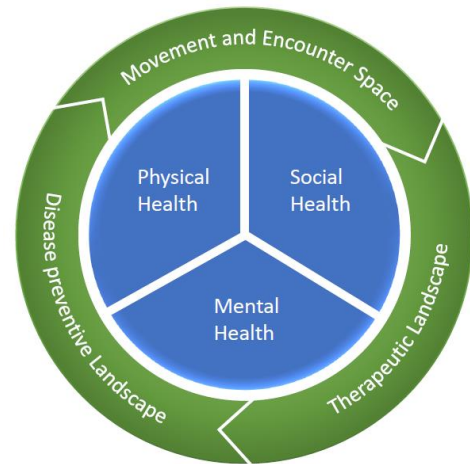


Fig. 1: The positive influences of landscape on health

that the planet is not harmed in order to prevent damage to our health. It encompasses the idea that our species must live within a certain “action space”. If one or more boundaries are crossed, it could affect planetary systems to such an extent that the survival of the human species would be at stake (Whitmee, 2015). A zero or positive impact is possible. This is the basis of the biophilic city (or rural) area, which can help to direct such policies and projects (within a multidisciplinary environment) to deliver these aspirations. The use of nature-based solutions and related blue-green infrastructure is central to this concept and applies to urban parks, private and public gardens, community gardens, etc.

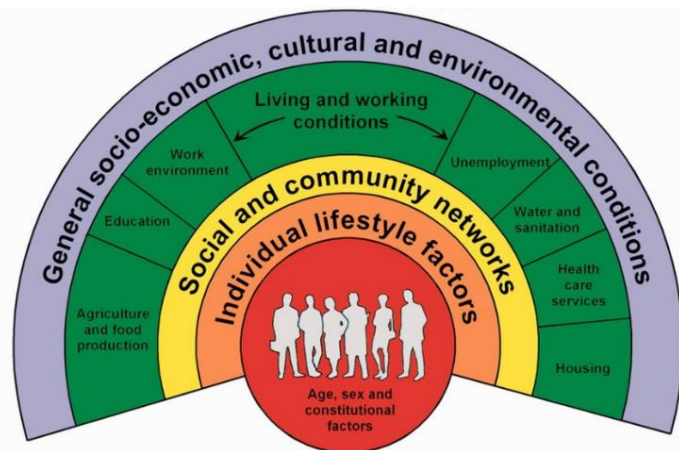


Fig. 2: Model of health determinants (Dahlgren et al., 1991)

35. The positive effects of landscape on people can also be described with the concept of landscape services, which could be defined as “landscape functions that provide direct economic, social and environmental benefits to individuals and society” and echoed the concepts of ecosystem services or of

⁴ "Movement space" refers to areas that are conducive to physical activity. "Encounter space" refers to areas which satisfy the needs for social exchange by providing attractive places where encounters with other people can take place.

Nature's Contributions to People (Swiss Federal Office for the Environment, 2020; Swiss Federal Council, 2022). The point of the approach is to show that landscape provides a wide range of different 'services' for the well-being of people. These services fall into several categories: regulating services, such as pollination or water purification; material services, such as food or energy; and non-material services, such as recreation or aesthetic enjoyment (Keller et al., 2020).

36. The correlation of landscape and health, and more specifically the positive influence of green spaces on human health and well-being, both for residents and for visitors and tourists, are also proven by various studies (Sullivan et al., 2017; Ragetti et al., 2017; WHO Regional Office for Europe, 2016; Stenfors et al., 2024).

3.2 Health-promoting aspects

37. Health promoting landscapes encompass a wide range of environments including forests, lakes and public parks but their positive impact on human health depends primarily on their quality and accessibility. The type of landscape is less important than the ability for individuals to easily interact with these spaces in their everyday lives (WHO Regional Office for Europe, 2016; Twohig-Bennett et al., 2018). Attractive everyday landscapes promote active mobility, healthy lifestyles and enable social interactions and possible daily relaxation as well as contact with nature, and therefore strengthen physical, social and mental health. It is thus essential to promote quality in the everyday landscape near residential, educational, cultural as well as areas of employment and tourist accommodation. The following section explores in more details the specific ways landscapes support physical, mental and social well-being.

38. Landscapes play a crucial role in disease prevention by offering a variety of environmental benefits that contribute to physical health. Beyond their aesthetic appeal, these spaces provide multi-sensory experiences and essential areas for retreat, allowing individuals to escape human-made noise, pollution, disturbing odours and artificial lighting. Various natural elements within landscapes protect human health. For example, trees and soils filter out pollutants, improving air and water quality and preventing harmful substances to enter ecosystems. Access to sunlight is moreover vital for vitamin D synthesis, which is essential for overall human health. Rich biodiversity further benefits physical health by offering resources for medicines and preventing the spread of disease-carrying organisms (United Nations Environment Programme, 2015). Green spaces such as parks provide habitats for animals and plants, reduce the temperature of urban heat islands and bind carbon dioxide (Gherri, 2024). Therefore, and based on further international studies, the WHO recommends that all people should have access to green spaces within 300 metres, which is equivalent to about five minutes walking time (WHO Regional Office for Europe, 2016).

39. Natural environments serve as catalysts for mental healing, allowing the higher cognitive centers of the human brain to rest and reset, providing some of the first scientific evidence of the healing powers of nature (Marques et al., 2022). A growing body of evidence indicates a direct link between exposure to nature and a range of health benefits, including reductions in anxiety, fatigue and depression, lower rates of inflammatory diseases, type 2 diabetes and obesity, improved concentration, increased immune function and reduced mortality. In urban settings, access to near natural spaces such as urban gardens, river corridors, unsealed surfaces, trees and woodland, bodies of water, ventilation corridors or green roofs and facades plays a crucial role in promoting mental health by providing space for relaxation, exercise, reflection and social interaction (Soga, Gaston, & Yamaura, 2017; Haywood et al., 2024). They also add ecological value to urban areas, as they help creating a pleasant climate and promoting good water balance and biodiversity. These spaces, as integral components of high quality, well-planned urban landscapes, are especially important in reducing stress and enhancing well-being in densely populated areas. Lately, as social tensions associated with the Covid-19 pandemic, climate change and inequalities have increased the need for places of emotional retreat and healing, therapeutic landscapes have become a growing international interest (Honey-Rosés et al., 2021).

40. "Therapeutic Landscape" was first defined in 1992 as a place "where physical and built environments, social conditions and human perceptions combine to produce an atmosphere which is conducive to healing" (Gesler, 1992). Since then, the concept has evolved to include not just physical aspects of the landscape, but also emotional, material, affective, cultural and spiritual dimensions (Bell

et al., 2018). Indeed, successful therapeutic landscapes also have to consider the social and cultural context of their location and respond to each user's environmental, mental and physical needs (The University of Texas at Arlington, 2012). Contextual factors, such as time, and cultural systems ought to be taken into consideration, with site-specific interventions for both human and landscape health. Importantly, research has demonstrated that the recovery process for patients with the same pathology is accelerated for those who have visual contact with green spaces and quality landscapes (Elsadek, Liu, & Xie, 2020; Ulrich, 1984). People with acute and terminal illnesses often seek a place of solitude and need time and space to reflect on significant life and health changes (Bell et al., 2018).

41. Social well-being thrives in attractive and healthy environments that foster encounters, interactions and community engagement. Access to natural or urban areas that encourage people to exercise, do physical activity and outdoor recreation is essential for promoting social well-being. A varied landscape in the form of movement spaces and encounter spaces makes it possible to satisfy the needs for social exchange, rest, physical activity and community building and therefore makes a significant contribution to health, and also to equal opportunities in the population, especially if everyone has access to it (Larson & Hipp, 2022). Such opportunities attract and serve not only local needs, but also those of visitors, thus boosting sustainable urban and rural tourism (Terkenli et al., 2020). In addition, it is important that there are architecturally well-designed green urban neighbourhoods with appropriate and attractive infrastructure for active mobility as well as near-natural green spaces outside the cities that allow diverse nature experiences (World Economic Forum, 2021). Spending time in a natural environment provides more exercise opportunities, stimulates the immune system, strengthens mental health and reduces stress (Frumkin et al., 2017; Remme et al., 2021).

3.3 Cultural aspects

42. In addition to their vital role in supporting physical, mental and social health, landscapes are also essential to well-being for cultural reasons. They help shape identities, preserve historical memories, and foster a sense of place, attachment and belonging (Wales Center for Public Policy, 2021). The degradation, impoverishment and standardisation of the landscape – often driven by urbanisation and industrialisation – have been shown to negatively affect human health (United Nations Environment Programme, 2000; Olsson, et al., 2019). In response to these transformations, the first landscape policies and organisations dedicated to their preservation were developed. As landscapes became increasingly altered and less recognisable, there was a growing need to protect their characteristic features and preserve their cultural significance. Studies further support the cultural importance of landscape. Research in Turkey and Slovenia for example demonstrate how cultural ecosystem services contribute to local identity and social cohesion by enhancing quality of life through traditional practices and natural landmarks (Baylan et al., 2023; Kostanjšek & Golobič, 2023). Additionally, green spaces in historically and culturally valuable residential areas have been found to foster a strong sense of place and emotional connections among residents (Hosseini et al., 2021). Maintaining features such as hedgerows, mountain pastures, terraced vineyards, and wooded pastures is thus not only of ecological interest but also helps to make the land more legible, ensuring that landscapes continue to play a central role in the cultural heritage and identity of communities. These findings underscore the need to integrate cultural values into landscape policies to enhance both individual well-being and community resilience.

3.4 Economic aspects

43. Healthy landscapes not only contribute to individual physical, social and mental well-being, but also offer significant economic benefits, as a relatively small investment in the landscape can lead to a massive decrease in healthcare costs. A report on the impacts of woodland walks in the UK revealed that such natural spaces contribute to savings of £185 million per year in mental healthcare costs by helping prevent and alleviate mental illness through nature-based activities (Saraev, O'Brien, Valatin, & Bursnell, 2021). These savings are a result of reduced pressure on healthcare services, including fewer visits to general practitioners and lower reliance on mental health treatments. In the UK, healthcare providers, policy makers and governments promote the health benefits of spending time in nature and launched the “Green Social Prescribing” project in 2021 (Haywood et al., 2024). It provides healthcare professionals with the resources required to encourage patients to engage with nature as part of their treatment. The resources offer ways to interact with nature that can support mental or physical

health, as well as potentially cultivate personal and lasting links with nature that inspire willingness to protect it. These interventions have proven to be cost effective compared to more traditional mental health treatment, as the project showed an estimated £2.42 in social benefit for every £1 invested. This return on investment was found to be between \$4 and \$11 for every \$1 invested in a study in the USA. In the same study, parks and green spaces are shown to contribute broadly to economic activity, generating \$218 billion in 2019 by improving water and air quality, managing stormwater and encouraging public development (Trust for Public Land, 2024). In New York, for example, parks contribute \$1.14 billion in healthcare savings for over 1 million residents who meet physical activity guidelines by exercising in these spaces (Trust for Public Land, 2022).

3.5 Central importance of interdisciplinary expertise

44. Realising the vast economic and health benefits of landscapes requires the involvement of multiple different and special disciplines, cooperating to ensure that the design and management of these spaces meet high quality standards. One of the main disciplines trained in this field of work is landscape architecture, which encompasses a wide variety of fields of activity, ranging from spatial and landscape planning, as well as the design of various green and other open spaces for implementation, including management guidelines, to research and the coordination of the various disciplines in the field of landscape development and management. One of the possible answers to reap the health benefits of the landscape is to create spaces of environmental and landscape quality, which the Landscape Institute has called "Healthy Places" (see chap. 4.1.) (Landscape Institute, 2013). In this perspective, the importance of the quality of the green space provision to the residents and visitors of the cities and settlements should be one of the key priorities of the urban, sub-urban and rural development on all levels to secure the environment of a stable physical and mental health as well as social well-being. Due to their vast impact on human health, landscapes require comprehensive, systematic and well-coordinated planning, designing and stewardship. This is further explored in Chapter 5 "Spatial Planning and Landscape Architecture".

4 Review of the scientific literature on the connection between landscape and health

45. The scientific literature suggests that the relationship between landscape and health is complex and influenced by multiple factors. The environmental influences that affect health are diverse. Nevertheless, there is evidence that exposure to well-designed, and notably natural landscapes of high quality can have positive effects on health and well-being. Human health benefits from a quality environment.

46. In this chapter the different elements of the articulation between landscape and health will be illustrated by scientific references. Thereby the focus will be on disease prevention, the importance of quality over quantity, health benefits through participation, the role of biodiversity, exemplary health-promoting landscapes and potential fields in research.

4.1 Preventing non-communicable diseases (NCD's) through landscape

47. According to a Swiss study, non-communicable diseases such as obesity, diabetes, cardiovascular disease, back pain, cancer and bone loss contribute 80 per cent of healthcare costs in the country (Swiss Federal Office for Spatial Development, 2022). Heavily trafficked roads, for example, have a negative impact on health. Noise pollution can trigger sleep disorders, promote the occurrence of high blood pressure and cardiovascular diseases as well as diabetes and impair cognitive performance (World Health Organization, 2022). Increased heat waves due to climate change and air pollution caused by traffic are causes of respiratory and cardiovascular diseases (European Society of Cardiology, 2022). According to studies from a high number of different countries, light pollution is deleterious to human health too. The predominant focuses lay on cancer, sleeping disorders, depression and obesity (European Environment Agency, 2022). The WHO estimates that 12.6 million deaths a year can be attributed to the polluted environment, of which 1.4 million deaths occur in the European Region (World Health Organization, 2016).

48. A varied landscape and an environment free of pollutants are required to promote human health. Spending time in nature and attractive landscapes helps to strengthen physical well-being, serves to

reduce stress, prevents NCDs, and promotes the immune system and mental health. Attractive green spaces and an area of unbuilt land that allows people to experience nature not only provide valuable habitats for animals and plants, but also contribute to people's physical and mental well-being (Swiss Federal Office for the Environment & Swiss Federal Office of Public Health, 2019). Research for example reveals that exposure to residential green spaces is linked to a ~10% decrease in cardiovascular mortality (Hong, et al., 2020). According to many studies, being active is another important and proven protective factor for many non-communicable diseases. Movement and encounter spaces increase both physical activity and participation in society and promote integration and social health, especially among the elderly (Swiss Federal Office for Spatial Development, 2022).

4.2 The importance of quality in spatial planning and landscape architecture illustrated by the example of healing gardens promoting mental health and social well-being

49. Therapeutic landscapes promote mental health. However, while a growing body of research shows that interaction with nature plays a crucial role in mental well-being and, for people in need, faster recovery from psychological trauma or stress, a review of hospital gardens found one example that had a measurable negative impact on patients' health (Ulrich et al., 1999). Later on, extensive reviews of healing gardens stated that not all gardens are healing gardens (Stigsdotter et al., 2002). The example of healing gardens illustrates the importance of focusing on quality. Usually, people think of gardens as an enclosed and safe place where one takes refuge to find shelter, comfort, and relief from grief and pain. However, not all types of gardens provide these features. Healing gardens need to fulfil certain principles to have a healing effect. They must facilitate a health service that is patient-centred and focused on the diverse needs of all. Specific design features, such as sensory stimulations, plant diversity and accessibility, have a crucial role in enhancing these therapeutic outcomes (Patwari et al., 2024; Nieberler-Walker et al., 2023; Heath, 2004). Gardens which meet these conditions have a vast healing influence on humans, according to numerous studies. Research on the impact on people's health and well-being is carried out by different research disciplines, such as medicine, environmental psychology, and landscape architecture (Grahn et al., 2002). They state that, on the one hand, the visitor's health effects are based on the experiences of the garden space as such, its design, and its content. The nature-like surroundings and wild nature have a restorative influence on emotional centres in the limbic system of the brain (Imperatori, et al., 2023). Especially "verdure" also has a restorative influence on cognitive functions (James, 1981). On the other hand, activities in the garden room provide health effects too. Numerous medical and horticultural therapeutic scientists state that the health effects are derived from the fact that work in a garden is particularly obvious, meaningful, and pleasant (Panțiru et al., 2024; Thompson, 2018; Buck, 2016). Gardening can stimulate a great number of cognitive processes and physical exercises. In addition, the garden with its shapes, colours, odours, and the activities that can be carried out there generate an "interactive environment" which benefits the physical health as well as the mental and social well-being (Grahn et al., 2002).

4.3 Biodiversity and human health

50. The multi-layered relation between biodiversity and human health is highly complex. Identifying the health consequences of habitat loss and changes in biodiversity is challenging. Nevertheless, there are a lot of scientific discoveries. Various studies indicate that an environment with a lack of environmental microbial diversity increases the tendency to allergies, especially in children, and promotes chronic inflammation (Haahtela, 2019; WHO and Secretariat of the Convention on Biological Diversity, 2015). Otherwise, the microbial but also marine realms of the living world are almost completely unexplored and hold enormous potential for the development of new medicines due to their diversity and the medicines that have already been discovered (Chivian & Bernstein, 2008). In the case of natural product drugs, plants remain the largest source. Of the estimated 400,000 plant species that populate the earth, only a tiny fraction has been studied for their pharmacological potential (Singh, 2015). About 60,000 plant species are used for medicinal purposes worldwide, and about 40 per cent of these species are threatened with extinction (WHO and Secretariat of the Convention on Biological Diversity, 2015). In addition to producing medicines, a large biodiversity also serves to mitigate climate change. Species-rich green spaces in urban areas counteract summer heat islands, clean the air of pollutants and regulate the urban microclimate. Furthermore, mussels help filter water, and insects pollinate plants and ensure good yields in agriculture (Swiss Federal Office for the Environment

& Swiss Federal Office of Public Health, 2019). Accordingly, in ecosystems with a high level of biodiversity, there is predominantly a fine balance between pathogens and hosts. For example, up to two thirds fewer ticks appear in areas where there are particularly large nests of red forest ants (Zingg et al., 2018). A higher level of biodiversity can also play a role on mental well-being. Studies indeed show that encounters with rich natural diversity have a positive impact on mental well-being, suggesting that not only the presence of natural environments, but also the level of biodiversity plays a crucial role on mental health (Hammoud et al., 2024; Fuller et al., 2007).

4.4 Examples of health-promoting and healing landscapes

51. Everyday landscapes may have a massive impact on human health. An appropriate and qualitative use of green spaces in urban areas has a significant positive influence on people. Recent studies highlight the numerous benefits of urban green spaces that have been demonstrated over an extended period in various international research. These studies emphasize their valuable contribution to physical, mental, and social well-being, particularly in urban context, where the expansion of cities and increasing soil sealing have made such spaces more crucial. They show how green spaces play a significant role in biodiversity conservation, climate change mitigation, producing habitats and reducing urban heat. It shows furthermore that stronger connections with nature not only improve human health, but also foster pro-environmental behaviours, underscoring the essential role of urban green spaces in promoting both individual health and environmental sustainability (Barragan-Jason et al., 2023; Jabbar, Yusoff, & Shafie, 2022). In order to benefit from these and other advantages of urban green spaces, it is essential that they are of an adequate size and quality and located close to people. For the best possible implementation, the collaboration between various disciplines and the participation of the population are indispensable (see chapter 4.5.) Besides everyday landscapes, there are also specific landscapes that have a great variety of positive effects on human health.

52. Research proves the stress-reducing effect of spending time in nature (Stier-Jarmer et al., 2021; Grilli & Sacchelli, 2020). The forest, for example, provides a pleasant atmosphere, reduces noise, wind and solar radiation and stores moisture. In times of increasing heat, this is an obliging cooling. Spending time in the forest can strengthen the immune system and prevent non-communicable diseases. The benefits include lowered blood pressure, a lower heart rate and strengthened muscles, as well as reduced release of the stress hormone cortisol. This leads to several relaxation reactions in the body. In addition, positive feelings such as good mood are promoted, while negative feelings such as stress, fatigue, depression or anxiety decrease (Forest Europe, Liaison Unit Bratislava, 2019). An astonishing aspect is also the preventive effect of longer stays in the forest. According to a study, it turns out that people who had spent three days in the forest had increased numbers of their defence cells and these had also become more active (Cervinka et al., 2014). This finding aligns with recent research, indicating that regular exposure to nature can enhance overall immune function (Andersen, Corazon, & Stigsdotter, 2021). In order to enable all people to enjoy a health-promoting environment, prerequisites such as quick and easy access to nature are needed.

Attention Restoration Theory (ART)

One aspect of the attention restoration theory of the psychologists Rachel and Stephen Kaplan asserts that the ability to concentrate is best regenerated when the environment draws attention to itself without the person observing having to make an effort. This enables a mental distance from everyday life (Kaplan & Kaplan, 1989).

53. Other research shows that water-rich natural landscapes have a greater effect on human well-being than other environments (Marselle et al., 2013). A Greek study for example shows that increased proximity and exposure to blue spaces is linked to a reduction in overall natural mortality risk, particularly for cardiovascular, respiratory and nervous system diseases (Kasdagli, et al., 2023). To systematically gain knowledge about the healing power of water, the European Union is funding several comprehensive projects under Horizon 2020, in particular SOPHIE (Seas, Oceans and Public Health in Europe) and BlueHealth, a research project that focuses on the health-promoting effect of rivers, lakes or seas (Seas, Oceans and Public Health in Europe; BlueHealth, 2020).

Stress Reduction Theory (SRT)

The psycho-evolutionary stress reduction theory of architecture professor Roger Ulrich states that humans respond to an environment with vegetation and water with relaxation and well-being (Ulrich et al., 1991).

4.5 Potential fields in research

54. The Global Burden of Disease Study of 2019 indicates that air pollution is responsible for up to 6.5 million premature deaths worldwide each year (Institute for Health Metrics and Evaluation, University of Washington, 2020). The preventive effect of the landscape on pollutants is immense. This indicates a great potential for further research in this field. It would be very valuable to know more exactly which sensually perceptible characteristics of the landscape can improve health and to what extent. Furthermore, it is unclear whether certain landscape features can have different effects on the health of different population groups, such as children or older people. The significance of landscape changes on health as well as the consequences of the alienation of certain population groups from nature on their health need to be investigated. This also concerns the cultural dimensions of the landscape, such as the desertion of the countryside. Another vast potential exists regarding the social impact on landscapes such as the influence of recent health trends or changing eating habits. A further expansion in the research field of one health and planetary health is therefore of high importance (Royal Netherlands Academy of Arts and Sciences, 2023), including the means by which landscapes are designed, constructed, maintained and managed. Exploring these dimensions can reveal how integrated approaches to health and environment sustainability can improve quality of life for diverse populations.

5 Spatial planning and landscape architecture

55. Articles 6.d and 6.e of the Landscape Convention promote the implementation of landscape policies that aim to plan, protect and manage landscapes. These policies strive to balance sustainable development with local resources, while being tailored to specific features like landscape integration, material choices and building design. This goes in line with the WHO Healthy Cities approach (World Health Organization, 2020), which stresses the importance of urban planning and states “promoting healthy urban planning and design” as one of the main goals of the initiative. In this context, the roles of spatial planning and landscape architecture become increasingly important. The 10th Council of Europe Conference on the European Landscape Convention (Council of Europe, 2019), held in Strasbourg on 7 May 2019 further promotes the professional recognition of landscape architects. The conference encouraged member states to recognise the profession at national and international level, to support a multidisciplinary approach to landscape through co-operation of all relevant professions in all phases of the planning process and to increase the diversity of disciplines in the training of landscape professionals in areas such as science, planning and managing. The Report and Recommendation CM/Rec(2021)10 of the Committee of Ministers to member states on the implementation of the Council of Europe Landscape Convention - Town Planning and Landscape, emphasizes that “landscape can represent the foundation, a means and the end of a new type of town planning that is in tune with today's challenges”.

56. The demands on the landscape and its use are ever-changing. The change has even intensified during the COVID-19 pandemic. It is necessary to assess how, for example, the trend towards increased outdoor activities will affect health and landscape in the longer term (Forum Landscape, Alps, Parks , 2021). The aim of spatial planning and landscape architecture must be to offer all people a variety of landscapes that not only enable a healthy life but also ensure the sustainability of the landscape itself. The creation and preservation of suitable landscape areas will be crucial to achieving the aspirations outlined in this report. In this context, necessary spatial and landscape planning instruments must be developed and rules defined that prevent the use of the landscape from putting it under too much pressure and thus damaging it. Equally, with regard to climate change, the importance of ensuring proper investment in landscape as part of any public or private development is now crucial. Shade-providing trees and parks can make a decisive contribution in this respect (World Resources Institute, 2023). Nevertheless, the value of greening is much greater than simply providing shade to significantly reduce daytime temperatures especially in urban areas. It is however fundamental in terms of the health of the landscape and biodiversity that the right species are planted in the right place.

57. Therefore, this chapter focuses on landscape design. Important factors are highlighted that should be considered in the design depending on the influence (pandemic and climate change). Furthermore, an ideal implementation of the principles of this report is explained on the basis of collaboration and participation and how a healthy environment can be secured and provided for all people.

Above-ground vegetation, especially trees, absorb CO₂ and produce oxygen in exchange. As such, carbon is temporarily or permanently withdrawn from the carbon cycle. The thermodynamics of a single tree indicate that, in addition to carbon sequestration, it can also provide a whole range of other climatic "services". The solar energy use of an adult tree through photosynthesis is a particularly efficient process. For example, to produce approximately 1,000 litres of water evaporation, roughly 100,000 calories are withdrawn from the environment. About 5% of the radiated energy is converted into biomass and absorbs the carbon for longer. In addition, the crown of a mature tree operates as a free-standing anti-flood reservoir. In one year, such a tree can capture and evaporate of 1,500 gallons of rainwater, preventing this falling on the ground and running off. Thus, mass tree planting can significantly modify a local climate.

5.1 Healthy places

58. Landscapes consist of complex interactions of natural and human-made factors that contribute to both their aesthetic and functional qualities. The profession of landscape architecture is based on understanding how these complex relationships function. Landscape architects plan, design and manage land resource in a sustainable way so the best possible outcome for people, the environment and the economy are achieved. Their skills are used to get positive results for people's health and well-being at all scales and phases of development. This goes from protecting natural resources such as air, water, and soil, which form the basis for human health and well-being, to reducing healthcare costs by creating therapeutic landscapes that have a preventive effect on people with existing conditions. To implement this in a structured way, the Landscape Institute in London has established five principles for creating "Healthy places". The Institute considered in addition to the effects of physical environment also personal and social factors (Landscape Institute, 2013).

Five Principles for creating "Healthy Places" set out by the Landscape Institute (2013)

1. Healthy places improve air, water and soil quality, incorporating measures that help us adapt to, and where possible mitigate, climate change
2. Healthy places help overcome health inequalities and can promote healthy lifestyles
3. Healthy places make people feel comfortable and at ease, increasing social interaction and reducing anti-social behaviour, isolation and stress
4. Healthy places optimise opportunities for working, learning and development
5. Healthy places are restorative, uplifting and healing for both physical and mental health conditions"

(Landscape Institute, 2013)

5.2 An outlet in a time of pandemic

59. The COVID-19 pandemic has had a significant impact on human health and the landscape. It is difficult to determine which European cities had the most drastic measures, as the response to the COVID-19 pandemic varied widely across the continent. However, cities that were hit hardest by the pandemic, such as Madrid, Paris and London, generally implemented stricter measures earlier and for longer periods of time. Especially the limitation of physical activity opportunities during the COVID-19 pandemic, including the closure of urban parks or curfew restrictions in several European cities, have shown the importance of these spaces for physical and mental health (Slater et al., 2020).

60. A large part of working people suffers from work-related stress and at the same time many people do not move enough. Increasing digitisation during the COVID-19 pandemic reinforced this trend. Home office duties and the lockdown highlighted the need for and importance of green spaces in close proximity. Numerous studies also show that spending time in green spaces has a positive effect on physical and mental health. The (over-)use of recreational areas in the vicinity of settlements was therefore enormous during the pandemic. An issue in this regard is the unused potential of generous "distance green spaces" on private properties, which are in general hardly used. These can, for example, be unoccupied private areas with short-cut lawns that are tangential to a public playground. Such private areas can ideally be included in public use. The strict separation between public and private recreational space seems outdated (Swiss Federal Office for Spatial Development, 2022).

61. Overall, the COVID-19 pandemic has highlighted the correlation between human health, the environment, and the built landscape, and has emphasised the need for a more integrated approach to urban planning and landscape planning.

5.3 Climate change and human health

62. WHO calls climate change "the greatest threat to human health" (World Health Organization, 2021). Rising sea levels, the spread of infectious diseases and ozone pollution are just some of the many risk factors (see Fig. 3) (National Center for Environmental Health, 2022). The effects are already being felt in healthcare. Human health suffers massively from the accumulation of extreme weather events such as heat waves, floods or landslides. Climate change affects health both directly, for example through heat or smog, and indirectly through changes in ecosystems. They have an impact on cardiovascular diseases, respiratory

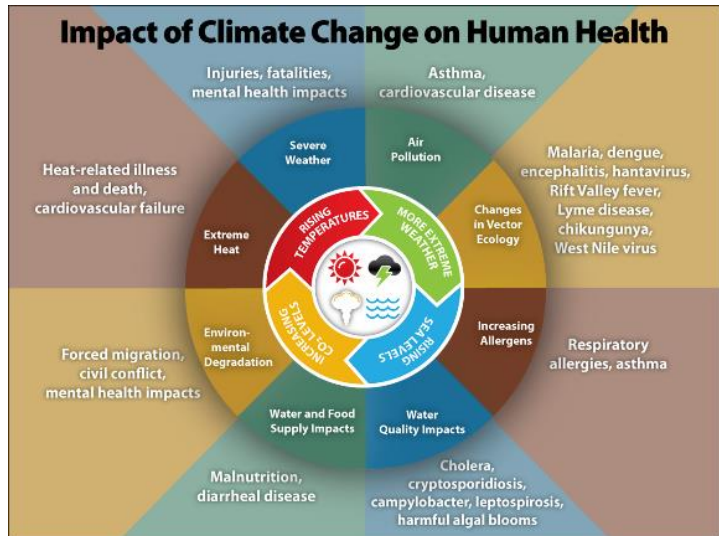


Fig. 3: Impact of Climate Change on Human Health (National Center for Environmental Health, 2022)

infections and on mental health by triggering stress or exhaustion (Swiss Federal Office of Public Health, 2022). Climate change also encourages the advance of ticks and various insects such as mosquitoes, which can potentially transmit diseases (Caminade et al., 2019; Intergovernmental Panel on Climate Change, 2014). The results of a study from the lancet shows that 6'700 deaths in European Cities could be attributed to the effect of Urban heat islands in 2015, and that 2'644 (40 %) of these deaths could have been avoided if there had been 30 % tree coverage at a grid-cell level (Jungman et al., 2023). With an estimated 250'000 deaths per year due to climate change between 2030 and 2050 (World Health Organization, 2018), it is no coincidence that the latter is being called the biggest health crisis of the 21st century. In order to mitigate it, green spaces in cities must be promoted as a matter of urgency, soil sealing must be reduced and access to various landscapes must be made attractive for pedestrians and cyclists⁵. However, this does require a collaboration between urban engineering, provision of services and the establishment of 'root zones' to support a 30 % cover and clear guidance, specification and standards to ensure delivery of a good quality green canopy and supporting understory.

5.4 Collaboration and participation

63. The management of landscapes should be guided as much by their importance for health as for all of their other functions. People should understand how the aesthetic and functional qualities of a landscape can enhance the quality of life (Landscape Institute, 2013). Educating people about the link between landscape and health as well as a collaboration across authorities and disciplines is therefore indispensable. Urban as well as spatial and transportation planning, the food production, energy industry, healthcare and many other fields are required (Forum Landscape, Alps, Parks, 2021). To promote this kind of collaboration, there are concepts such as "Planetary Health" or "One Health", which take an integrative approach that aims to sustainably optimise the health of people, animals and ecosystems (Whitmee, 2015; WHO, One Health).

Planetary Health

"The achievement of the highest attainable standard of health, well-being, and equity worldwide through judicious attention to the human systems—political, economic, and social—that shape the future of humanity and the Earth's natural systems that define the safe environmental limits within which humanity can flourish. Put simply, planetary health is the health of human civilisation and the state of the natural systems on which it depends." (Whitmee, 2015)

⁵ Report on Urban landscapes and climate change: the contribution of Landscape Architects to improve the quality of life – Council of Europe 11th Conference on the European Landscape Convention, Strasbourg, 26-27 May 2021

64. Cross-sectoral collaboration between various actors including spatial planning, landscape architecture, health, physical activity, recreation and sport contributes to the creation of quality spaces. An attractive environment stimulates recreation, physical activity resulting in improved health including mental health. In an increasingly urban society, coordination in the establishment of green spaces and local recreation areas is of great relevance and is a key area where the specific contribution of landscape architecture can contribute to improving the quality of life and well-being, responding to climate change and the changing needs of society. Multi-disciplinary professional groups which include planners, highway engineers, landscape architects, urban designers, ecologists and architects must be involved in the process, as well as economists, politicians and the general public, but to achieve real long-term sustainability and resilience, structural change cannot be a building-led approach. Such an approach would inevitably be deflected, unnecessarily expensive, badly targeted and inefficient. An approach which is founded on nature-based solutions (NBS) must take a holistic, synergetic view of urban life and contemporary problems of climate change, species diversity, pollution, changing working methods, travel patterns as well as emerging technologies.

One Health

"One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent.

The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate changes and contributing to sustainable development." (One Health High-Level Expert Panel, 2022).

65. As noted above, an essential element of collaboration is the participation process with the population, in line with articles 5 and 6 of the Landscape Convention. It involves engaging local residents and stakeholders in the decision-making process helping to ensure that the landscape is designed and managed in a way that meets the needs and preferences of the public. For example, by involving local residents in the design process, it is possible to create spaces that are safe, accessible, and appealing to the community. This, in turn, can increase the community's use and enjoyment of the green space, leading to improved physical and mental health outcomes. The theory of the sociologist Aaron Antonovsky states that a person is healthy or can become healthy when his immediate living environment is logical and understandable and when he/she can involve him/herself. This requires participation in the development of his external space. Participation in the design of one's everyday environment is therefore an important contribution to strengthening one's own health (Antonovsky, 1987).

66. In conclusion, collaboration and participation play a crucial role in promoting the well-being of communities through the joint design and management of landscapes considering the desires and opinions of the communities they serve. In terms of examples, there are already many initiatives. In the USA, the Trust for Public Land is a non-profit organization with projects where they work with communities to create and improve parks and green spaces, with a focus on ensuring that these spaces are accessible, safe, and appealing to all (Trust for Public Land, 2023). In the Netherlands, the "De Gezonde Stad" (The Healthy City) programme is a collaboration between the city and their community of local residents and other frontrunners to start projects and organise events that have a positive and sustainable impact on the city (EIT Climate-KIC).

5.5 Access to a healthy environment for everyone

67. Throughout Europe, access to green spaces in urban areas is unequal, with lower income neighbourhoods having less availability compared to wealthier areas (European Environment Agency, 2022; Guinaudeau et al., 2023). These disparities are often influenced by the housing market. Case studies from various European countries demonstrate the positive impact of focused efforts to equalize access to high-quality green spaces on urban residents' health and well-being. By involving local communities in the planning and management of these spaces, their specific needs can be taken into account, and a sense of ownership can be fostered, which in turn increases usage (European Environment Agency, 2022). This aligns with action 2.4 of the WHO “Global Action Plan on Physical Activity 2018-2030” (World Health Organization, 2018) which calls to “strengthen access to good-quality public and green open spaces (including river and coastal areas) and sport amenities by all people, of all ages and diverse abilities in urban, peri-urban and rural communities”. The WHO emphasises that these places should ensure the design is consistent with these principles of safe, universal, age-friendly and equitable access with a priority being to reduce inequalities.

68. In socially disadvantaged neighbourhoods, the population is more exposed to air and noise pollution from traffic and is affected more than average by traffic accidents. This leads to a reduction in walking and cycling, which further increases the risk of becoming ill. To break this vicious circle, it is particularly important in these neighbourhoods to ensure that the active mobility of the residents is promoted by upgrading the settlement and green spaces as well as the pedestrian and cycling infrastructure. In addition, access to attractive movement and encounter spaces must be kept within a short range. The integration of multiple uses within streetscapes is an activity that benefits hugely from the involvement of landscape architects. The Malmö suburb of Lindängen, considered particularly vulnerable, densely populated and with a low accessibility to green spaces, is an example where such improvements are happening. The city has greatly developed its cycling network over the last decades and has recently addressed the health-related issues with nature-based solutions, such as

Inequalities in green space access

- In Stockholm, Sweden, individuals with higher income have greater access to green and blue areas that are within walking distance from their homes (Goldenberg et al., 2018).
- In Lodz, Poland, 67% of children who belong to the poor income-related status group have limited exposure to visible greenery along their routes from home to school (Łaszkiewicz et al., 2020).
- In Porto, Portugal, mean distance to green spaces increased with the level of neighbourhood deprivation (Hoffmann et al., 2017).
- Similarly, higher income residents have more access to green spaces in Brussels, Milan and Prague (Buckland & Pojani, 2023)

Health benefits of urban green spaces for individuals from socially disadvantaged neighbourhoods

- In Leipzig, Germany, a high concentration of street trees within 100 metres of a person's home significantly decreases the likelihood of lower socio-economic status individuals being prescribed antidepressants (Marselle et al., 2020).
- In Belgium, proximity to green spaces is associated with reduced sales of cardiovascular medication for individuals with lower socio-economic status (Aerts et al., 2020).
- In the economically disadvantaged districts of Marseille, France, low-income individuals who engage in gardening had a higher supply of fruits and vegetables compared to non-gardening residents. This suggests that community gardens can encourage vulnerable populations to adopt healthier dietary practices (Martin et al., 2017).

the implementation of shared green spaces with edible elements, to increase biodiversity and increase attractiveness (European Environment Agency, 2022). Another good practice example is the creation of “superblocks” in Barcelona, where traffic is restricted in designated areas in order to reclaim space for pedestrians, promote green spaces, reduce pollution and encourage social interactions (Nieuwenhuijsen et al., 2024).

69. An additional contribution is made by school playgrounds, which are open to the public outside school hours. In the winter months, the sports fields and playgrounds of a lido can be used as well. This gives families and young people without their own outdoor space the opportunity to exercise in the fresh air (Swiss Federal Office for Spatial Development, 2022).

70. Children and adolescents in particular benefit from playing outdoors, not only by being physically active and training fine motor skills, but also by enjoying themselves socially with their peers. Studies have shown that children living in areas with higher amounts of nearby green spaces are more likely to be physically active, with a positive impact on their overall health and development (Islam, Johnston, & Sly, 2020). In addition, urban green spaces serve to cool down. This is very helpful for older people and the chronically ill, as they suffer particularly badly from heat waves in the cities (Johns, Almeida, & Rosenthal, 2024).

6 Conclusion

71. The present report has focused on the influence of landscape on health, demonstrating that landscape quality is central to human well-being. Synergies between landscape and health are important and increasingly recognized, underscoring the need to foster these connections through sustainable landscape management and planning.

72. Given the multidimensional nature of both landscape and health, the mobilisation of a cross-sectoral approach is crucial. While it is important to address negative health impacts, a particular attention must be given to the positive contributions that decisions made in other domains can have on human health outcome. A comprehensive landscape development can only be achieved by bringing together various disciplines, ensuring a holistic view of landscape management that considers its health benefits.

73. Landscape policies and instruments should systematically integrate health considerations, just as health policies should ideally also consider the landscape and its beneficial effects on health. A noteworthy example is the Swiss Federal Health Policy Strategy 2020-2030 (Swiss Federal Office of Public Health, 2019), which explicitly highlights the synergies between public health and the landscape. Among its 16 actions, the strategy includes “Preserving and supporting nature and landscape quality”. It stresses that “high-quality nature and landscapes (stimulating local recreation areas, abundant flora and fauna, clean air, acoustic quality) demonstrably promote relaxation and health and are an important way of encouraging people to take physical activity. Planning activities should therefore actively consider nature and landscape quality as a contributor to structural health promotion and enhance this quality by means of revaluation measures.”

74. Spatial planning instruments also play a central role in supporting these synergies. The health benefits of these spaces depend on the landscape qualities that are preserved and promoted. Expertise in landscape architecture is critical to ensure that these areas are designed with high-quality natural elements that are adapted to the local environment and are resilient to change. Studies have highlighted the decisive role played by the natural characteristics of these areas. The focus should not solely be on “greening” spaces, but also on fostering high-quality natural elements that are adapted to the site and resilient.

75. We conclude by adapting the famous Latin motto ‘*Mens sana in corpore sano*’ to reflect this report: ‘*a healthy mind and a healthy body in a healthy landscape*’.

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Appendix 1

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Appendix 2



T-FC (2024) REC 4 E REV (English only)

Strasbourg, 09 September 2024

COUNCIL OF EUROPE LANDSCAPE CONVENTION

WORKING GROUP ON *LANDSCAPE AND HEALTH*

ONLINE MEETING HELD ON 9 SEPTEMBER 2024

LIST OF PARTICIPANTS

Document prepared by the Secretariat of the Convention

Most participants gave their consent to the use of their data as described in the [Organisation's data protection policy](#)

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Appendix 3

Reykjavík Summit of the Council of Europe: United around our values *Reykjavík Declaration*

Appendix V of the Reykjavík Declaration - The Council of Europe and the environment

We, the Heads of State and Government, underline the urgency of taking co-ordinated action to protect the environment by countering the triple planetary crisis of pollution, climate change, and loss of biodiversity. We affirm that human rights and the environment are intertwined and that a clean, healthy and sustainable environment is integral to the full enjoyment of human rights by present and future generations.

We underscore the role that the Council of Europe may play as an Organisation working not only in the area of human rights, democracy and the rule of law, but with a longstanding and widely acknowledged track record in protecting the environment, environmentally friendly landscape management and public health. It has both the tools and the structures to address human rights and the environment, in the spirit of co-operation and by sharing experience and promising practice.

We note that the right to a healthy environment is enshrined in various ways in several constitutions of the Council of Europe member States and the increased recognition of the right to a clean, healthy and sustainable environment in, inter alia, international instruments, regional human rights instruments, national constitutions, legislation and policies.

We recall the extensive case-law and practice on environment and human rights developed by the European Court of Human Rights and the European Committee of Social Rights. We appreciate the ongoing work of the Committee of Ministers, the Parliamentary Assembly, the Congress of Local and Regional Authorities, the Commissioner for Human Rights, the youth sector and other parts of the Council of Europe to strengthen the protection of human rights linked to the protection of the environment.

We consider the Convention on the Conservation of European Wildlife and Natural Habitats (the “Bern Convention”) a unique international instrument aimed at aligning national standards and practices in conserving wild flora and fauna and their natural habitats at pan-European level and beyond, providing the necessary tools to strengthen intergovernmental co-operation and giving an opportunity to civil society to engage with governments and bring to their attention concerns about threats to biodiversity and natural habitats and their detrimental consequences.

We recall that the Council of Europe Landscape Convention - the first international treaty devoted exclusively to all dimensions of the landscape – specifies that the landscape has an important public interest role in the cultural, ecological, environmental and social fields and is a key element of individual and social well-being, and that landscape protection, management and planning entail rights and responsibilities for everyone.

We recognise the importance of access to information, access to public participation in decision-making processes and access to justice in environmental matters, as set out in the Council of Europe Convention on Access to Official Documents (the “Tromsø Convention”).

We recognise and support the vital role of civil society and other stakeholders, including national human rights institutions, regional institutions for the protection and promotion of human rights, youth, indigenous peoples, religious leaders and communities, as well as cities, regions and other sub-national authorities and local communities, in the protection of the environment.

We consider that strengthened Council of Europe action in this field will contribute to progress towards the United Nations 2030 Agenda for Sustainable Development Goals.

Together we commit to:

- i. Strengthen our work at the Council of Europe on the human rights aspects of the environment based on the political recognition of the right to a clean, healthy and sustainable environment as a human right, in line with United Nations General Assembly Resolution 76/300, The human right to a clean, healthy and sustainable environment, and by pursuing implementation of the Committee of Ministers Recommendation CM/Rec(2022)20 on human rights and the protection of the environment;
- ii. Reflect on the nature, content and implications of the right to a clean, healthy and sustainable environment and, on that basis, actively consider recognising at the national level this right as a human right that is important for the enjoyment of human rights and is related to other rights and existing international law;
- iii. Encourage the Council of Europe Development Bank to focus on the social dimensions of climate change and environmental degradation, and to help member States achieve a fair and inclusive transition that leaves no one behind by funding projects in its key sectors of activity, in line with its strategic framework;
- iv. Conclude as soon as possible the Council of Europe's ongoing work on a convention superseding and replacing the European Convention on the Protection of Environment through Criminal Law and on the consideration of the need for and feasibility of a new instrument or instruments in the field of human rights and the environment;
- v. Initiate the "Reykjavík process" of strengthening the work of the Council of Europe in this field, with the aim of making the environment a visible priority for the Organisation. The process will focus and streamline the Organisation's activities, with a view to promoting co-operation among member States. We will identify the challenges raised by the triple planetary crisis of pollution, climate change and loss of biodiversity for human rights and contribute to the development of common responses thereto, while facilitating the participation of youth in these discussions. We will do this by enhancing and co-ordinating the existing Council of Europe activities related to the environment and we encourage the establishment of a new intergovernmental Committee on environment and human rights ("Reykjavík Committee").

Recommendation CM/Rec(2024)...
of the Committee of Ministers to member States
for the implementation of the Council of Europe Landscape Convention -
Landscape and Health

*(Adopted by the Committee of Ministers on _____ 2024
at the _____ meeting of the Ministers' Deputies)*

The Committee of Ministers, under the terms of Article 15.b of the Statute of the Council of Europe (ETS No. 1),

Considering that the aim of the Council of Europe is to achieve a greater unity between its members for the purpose of safeguarding and realising the ideals and principles which are their common heritage and facilitating their economic and social progress;

Recalling its Recommendation CM/Rec(2022)20 to member States on human rights and the protection of the environment and that through this recommendation, inter alia, the Committee of Ministers:

- Referred to “member States’ obligation to guarantee, for everyone within their jurisdiction, the rights and freedoms defined in the Convention for the Protection of Human Rights and Fundamental Freedoms (ETS No. 5, the Convention) and relevant protocols thereto, and their obligations arising from the European Social Charter (ETS No. 35, the Charter), the European Social Charter (revised) (ETS No. 163, the revised Charter) and from other European and international human rights instruments”;
- Recalled “the existing standards contained, inter alia, in the Convention and the Charter and their interpretation by the European Court of Human Rights and the European Committee of Social Rights in the field of human rights and the environment”, and reaffirmed “that the Convention and the Charter are living instruments which must be interpreted in the light of present-day conditions”;
- Underlined “the Council of Europe’s commitment to environmental protection, which has resulted in the adoption of the Convention on the Conservation of European Wildlife and Natural Habitats (ETS No. 104), the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment (ETS No. 150), the Convention on the Protection of the Environment through Criminal Law (ETS No. 172) and the Council of Europe Landscape Convention (ETS No. 176)”;

Recalling the relevant recommendations of the Parliamentary Assembly of the Council of Europe, notably Recommendation 2211 (2021) “Anchoring the right to a healthy environment: need for enhanced action

by the Council of Europe” and Recommendation 2272 (2024) “Mainstreaming the human right to a safe, clean, healthy and sustainable environment with the Reykjavík process”;

Recalling that the member States of the Council of Europe, signatories to the Council of Europe Landscape Convention (ETS No. 176), as amended by the 2016 Protocol (CETS No. 219), stated that:

- (they are) “concerned to achieve sustainable development based on a balanced and harmonious relationship between social needs, economic activity and the environment” (Preamble);
- the landscape: “has an important public interest role in the cultural, ecological, environmental and social fields”; “is a basic component of the European natural and cultural heritage, contributing to human well-being”; “is an essential component of human being’s surroundings”; “is an important part of the quality of life for people everywhere: in urban areas and in the countryside, in degraded areas as well as in areas of high quality, in areas recognised as being of outstanding beauty as well as everyday areas”; “is a key element of individual and social well-being and that its protection, management and planning entail rights and responsibilities for everyone” (Preamble) ;

Recalling that each Party to the Council of Europe Landscape Convention undertakes inter alia to:

- “recognise landscapes in law as an essential component of people surroundings” (Article 5.a);
- “integrate landscape into its regional and town planning policies and in its cultural, environmental, agricultural, social and economic policies, as well as in any other policies with possible direct or indirect impact on landscape” (Article 5.d);

Having regard to its previous recommendations concerning the Council of Europe Landscape Convention, in particular, those regarding the link between landscape and health, including:

- Recommendation CM/Rec(2008)3 to member States on the guidelines for the implementation of the European Landscape Convention (*Guidelines for the implementation of the European Landscape Convention*);
- Recommendation CM/Rec(2017)7 to member States on the contribution of the European Landscape Convention to the exercise of human rights and democracy with a view to sustainable development (Preamble and recommendation a.);
- Recommendation CM/Rec(2021)9 to member States on landscape and responsibility of stakeholders for sustainable and harmonious development (Preamble and recommendation 1.b);
- Recommendation CM/Rec(2021)12 to member States on Integration of the landscape dimension into sectoral policies (Preamble and recommendation 2);

Recalling the *Reykjavík Declaration – United Around our values*, adopted by the Council of Europe’s Heads of State and Government at their 4th Summit, held in Reykjavík on 16-17 May 2023;

Recalling that in the framework of the above-mentioned Declaration, Appendix V - *The Council of Europe and the environment*, the Heads of States and Government emphasised that “the Council of Europe Landscape Convention – the first international treaty devoted exclusively to all dimensions of the landscape – specifies that the landscape has an important public interest role in the cultural, ecological, environmental

and social fields and is a key element of individual and social well-being, and that landscape protection, management and planning entail rights and responsibilities for everyone”;

Recalling the *Guiding principles for an integrated approach to culture, nature and landscape management - L.I.N.K.E.D.*, adopted by the Council of Europe’s Steering Committee for Culture, Heritage and Landscape (CDCPP), at its 12th Plenary Session (Strasbourg, 15-17 November 2023);

Considering the importance of guaranteeing the right to health protection established by Article 11 of the European Social Charter and the Revised European Social Charter, also in relation to the quality and diversity of the landscape;

Reaffirming the importance of the link between human rights and landscape, and that the quality of the latter can contribute positively to the realisation of a number of fundamental rights set out in the Convention for the Protection of Human Rights and Fundamental Freedoms, in relevant protocols thereto, and in the European Social Charter treaty system;

Reaffirming that the damage caused to the environment, of which landscape is an important dimension, may indirectly amount to a violation of certain fundamental rights enshrined in the human rights treaties mentioned above;

Convinced that :

- the quality of the landscape contributes to the well-being and health, both physical and mental;
- the planet’s triple crisis of pollution, climate change and loss of biodiversity has a negative impact on landscape quality;
- the degradation, impoverishment, and standardisation of the landscape are detrimental to the well-being and health of people.

1. Adopts the following Guidelines on the link between landscape and health.

2. Recommends that the Parties to the Council of Europe Landscape Convention take them into account in the framework of their landscape and health-related policies, and in any other policies with possible direct or indirect impact on landscape and health.

Guidelines on the link between landscape and health

1. HEALTHY LANDSCAPES IMPROVE THE HEALTH OF THE PEOPLE

Consider landscape quality as a health-promoting factor. Improve landscape quality as a public health measure.

Rationale:

The synergies between the two domains – landscape and health - are proven both scientifically and in practice. Landscape quality makes an important contribution to public health. The multiple services offered by the landscape provide opportunities to meet needs in the three main areas of health: physical, mental, and social. The reduction or absence of pollution and disturbing emissions is a priority. The landscape qualities of the surroundings (residential, work and recreation areas) offer an

appealing and health-promoting environment. These reflections on quality must be applied to everyday landscapes, as well as degraded landscapes, in accordance with the concept of landscape as promoted by the Council of Europe Landscape Convention.

2. SPATIAL PLANNING AND LANDSCAPE ARCHITECTURE AS KEY MEASURES FOR HEALTHY COMMUNITIES

Promote, conserve and protect landscape quality for healthy communities through spatial planning and landscape architecture.

Rationale:

Spatial planning and landscape architecture play a decisive role in promoting healthy communities. They can contribute to strengthening the landscape quality of an areas taking into consideration walkability, green infrastructure, and the integration of natural elements into the built environment can improve public health outcomes and enhance community well-being. There is a need therefore to encourage the development at national, regional and local level of an expert administrative and professional infrastructure that is fully competent in coordinating, in the public and private sector, landscape and environmental policies that will respond to 'landscape and health'. Such policies should address the challenges raised by the triple planetary crisis of pollution, climate change and loss of biodiversity for human rights and contribute to the development of a common response. Measuring, monitoring and reporting on the quality and diversity of the landscape, and the effect on the population, based on the landscape in which they live, work, play in and travel through, will be important.

3. QUALITY LANDSCAPE AS A STIMULUS FOR PHYSICAL ACTIVITY AND MENTAL HEALTH

Improve landscape quality to promote physical activity and mental health.

Rationale:

An environment which supports physical activity ("movement space") is central to promote health of both locals and visitors. The WHO noted in October 2022 that "almost 500 million people will develop heart disease, obesity, diabetes or other Non-Communicable Diseases (NCDs) attributable to physical inactivity, between 2020 and 2030" (World Health Organization, 2022). The promotion of movement space is highly important. It contributes as well to the target of a 15 per cent relative reduction of physically inactive people worldwide by 2030 set by the WHO in the "Global Action Plan on Physical Activity 2018-2030" (GAPPA) using the baseline of 2016 (World Health Organization, 2018).

4. ATTRACTIVE AND INVITING SHARED SPACES FOR PEOPLE TO MEET

Create accessible and attractive landscapes that encourage encounters, to contribute to people's health, social mixing and mixing between generations.

Rationale:

Social well-being is a key component of health, as the WHO definition of health emphasises. Thus, the creation of spaces that favour encounters (“encounter spaces”) for locals and visitors, offers a contribution to people’s health. In this context, the quality and accessibility of these spaces are central. An attractive space with high landscape qualities will motivate people to get out of their homes and will promote social interaction. The social mixing and the mixing between generations should be stimulated.

5. GREEN SPACES AND TREE PLANTING AS A FLAGSHIP MEASURE

Create new green spaces, conserve, protect and improve the landscape quality of existing ones and tree planting to mitigate some of the effects of climate change.

Rationale:

In an increasingly urbanised society, green spaces and local recreation areas are central to the promotion of public health. Urban green spaces provide beneficial effects for mental, physical and social health. They also help climate adaptation and mitigation, increase disaster resilience, and enhance biodiversity. Their services are therefore multiple. There is a need to prioritise and emphasise the importance of urban green spaces in the public health strategies. As such there is a need for example to urgently undertake major greening projects in towns and cities, in urban and peri-urban areas, to mitigate some of the effects of climate change concentrating on the use of indigenous species to enhance biodiversity whilst linking new planting to ameliorating surface water drainage to reduce the damaging effects of local flooding, soil erosion and pollution.

6. PROMOTION, CONSERVATION AND RESTORATION OF BIODIVERSITY

Promote landscape quality, landscape resilience and human health through biodiversity measures.

Rationale:

Biodiversity provides numerous benefits to human health, including the provision of food, medicines, and clean air and water. Biodiversity is an essential element of the landscape. It contributes largely to its richness and diversity and improves landscape resilience. However, the enjoyment of landscape quality must not impair the very characteristics that make these areas attractive and must not undermine the services they provide.

7. ENSURE CULTURAL INTEGRITY AND IDENTITY

Uphold and develop sustainably and collaboratively healthy landscape cultural integrity, identity and social role.

Rationale:

Landscape health reflects and requires healthy human communities, as the two are tightly interrelated and shaped together through time. All landscapes (both ordinary and extraordinary) are themselves cultural entities expressing and serving social roles and needs. Landscapes are an essential part of our shared heritage, linking communities together and shaping collective identities. As cultural entities, they serve social roles and needs, fostering a sense of place and emotional connection that enhances mental health and community well-being. Ensuring healthy landscape

means preserving not only their natural elements, but also their cultural ones, which can only be achieved through integrative and comprehensive stewardship.

8. REDUCE HEALTH RISKS THROUGH CLIMATE AND POLLUTION-RESILIENT LANDSCAPES

Invest in climate- and pollution-resilient landscapes to mitigate the impacts of climate change and pollution to protect and improve public health.

Rationale:

Climate change and pollution are having significant impacts on people's health and on the health of ecosystems. The creation of climate- and pollution-resilient landscapes, such as reforestation and the creation of green infrastructure, are important measures particularly in urban areas, which are affected by heat islands, to mitigate the impacts of climate change and pollution to protect and improve public health. The "greening" and "blueing" of urban areas should be encouraged in order to combat climate change and pollution.

9. PROMOTE AN INTERSECTORAL APPROACH

Foster synergies and intersectoral collaboration between landscape and health policies and practices, and other relevant domains.

Rationale:

Based on the statement that there are effective connections between landscape and health, landscape has to be considered by the public health sector, and correspondingly health by landscape policies. This would reinforce the synergies between the two domains, but synergies should also be sought with other relevant domains. These synergies could be built on the basis of Article 5 of the Council of Europe Landscape Convention which advocates the integration of landscape into sectoral policies. In a similar way, the "Health in All Policies" (HiAP) and "One Health" approaches are based on the observation that health is largely determined by policies that guide actions beyond the health sector, and include not just human, but also animal and plant health. While negative health effects must obviously be considered before decisions are taken, it is important to also consider and reinforce the positive contributions to health that decisions made in other domains can have. The actions undertaken by the spatial planning are of particular relevance. Synergies should therefore be fostered and intersectoral collaboration is essential.

10. RETURN ON INVESTMENT OF LANDSCAPE QUALITY ON HEALTH CARE COSTS

Invest in the quality of the landscape to reduce healthcare expenditures.

Rationale:

Healthcare costs are staggering and are constantly rising. Investments in the quality of the landscape can also be seen as an investment in public health. The return on investment, in terms of healthcare cost savings, can be considerable. This approach fits perfectly into the broad definition of health, as promoted by WHO, and which thus goes beyond the mere absence of disease.

11. PARTICIPATION IN AND EQUITABLE ACCESS TO HEALTHY LANDSCAPES

Promote democratic participation and social inclusion to foster access to healthy landscapes.

Rationale:

The development of landscape qualities must respond to the needs and expectations of the population. It is therefore essential to initiate participatory processes, according to article 5.c and article 6.d of the Council of Europe Landscape Convention. Everyone should have the right to a clean, healthy, and sustainable environment, as stated in the UNGA Resolution of 2022. Thus, it is particularly important to take into account disadvantaged social and economic groups, both in terms of health and the landscape. The complex and dynamic social and political contexts in which improving the quality of the people's surroundings takes place has to be considered to understand who will benefit in the short- and long-term, and to anticipate and reduce or eliminate unintended consequences so that these landscapes provide equitable, sustainable benefits for everyone.

12. EDUCATION AND PUBLIC AWARENESS

Raise public awareness and provide education on the links between landscape and health.

Rationale:

Raising public awareness (including NGOs', public administration, and politicians at local, regional, and national level) as well as providing education on the links between landscape and health can help build support for policies and actions that promote the qualities of everyday landscape, protect and conserve natural areas, promote sustainable land use practices, and enhance public health. These activities could be based on articles 6.a and 6.b of the Council of Europe Landscape Convention. The production and dissemination of knowledge on the link between landscape and health should be further continued and encouraged.