



GUIDEBOOK

**Concrete recommendations to enhance the well-being
And digital capacity of older adults, while promoting
Green and sustainable practices**

Project:

**BODY AND EARTH: ECOSOMATIC PRACTICES
FOR GREEN AGEING**

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INTRODUCTION

Project Context

This guidebook has been developed within the framework of the Erasmus+ project “*Body and Earth: Ecosomatic Practices for Green Ageing (BEEPGA)*”, a small-scale partnership in adult education co-funded by the European Union. The project responds to three interconnected societal challenges identified at the European level: population ageing, the climate crisis, and digital exclusion.

Across Europe, the proportion of adults aged 55 and above is rapidly increasing, while environmental risks, such as heatwaves, pollution, and climate-related health impacts, are becoming more pronounced. At the same time, many older adults face barriers in accessing digital tools and information, limiting their participation in social, educational, and environmental initiatives.

BEEPGA addresses these challenges through an integrated approach that combines green ageing, ecosomatic practices, and digital literacy. The project promotes a holistic understanding of well-being that connects body awareness, environmental responsibility, and social participation. In doing so, it aligns with key Erasmus+ priorities, including:

- environmental sustainability and the fight against climate change,
- inclusion and lifelong learning across generations,
- and the development of digital readiness and resilience.

The project is implemented through a collaboration between three partner organisations:

- **VulcanicaMente APS (Italy),**
- **EPIONE (Lithuania),**
- **4C: Cooperate–Communicate–Create–Change (Greece).**

Each partner contributed to the research, design, and validation of the guidebook, ensuring that the outcomes reflect diverse cultural contexts and community needs.

Aim of the Guidebook

This guidebook aims at offering concrete evidence-informed recommendations to support green and healthy aging, enhance the well-being of older adults, and to promote their social inclusion and active participation by improving their digital literacy, while addressing the climate crisis and promoting green and sustainable practices.

More specifically, the guidebook seeks to:

- support older adults (55+) in adopting sustainable daily practices that enhance physical, mental, and emotional well-being,
- strengthen awareness of the relationship between human health and environmental sustainability,
- improve digital literacy and confidence, enabling greater access to information, services, and community engagement,
- provide adult educators, social workers, and organisations with practical tools, methodologies, and learning approaches,
- and contribute to the broader goals of fostering resilient, inclusive, and environmentally responsible communities.

The guidebook is designed not only as a theoretical resource, but as a practical tool that can be used in workshops, training programmes, and community initiatives across different European contexts.

Overall Approach

The guidebook adopts a person-centred and evidence-based approach by integrating qualitative insights (focus groups), quantitative evidence (survey data), and academic research. It reflects both the lived realities of participants and the structural challenges they face, while offering practical, scalable solutions for educators, organisations, and communities.

Importantly, this methodology also ensures that the voices of the target groups, particularly older adults and those facing social or digital barriers, are central to the design of the guidelines, reinforcing the inclusive and participatory values of the Erasmus+ programme.

How to Use This Guidebook

This guidebook is designed as a practical and flexible resource for a wide range of users working with or supporting older adults in the context of green and healthy ageing.

Target Users

The guidebook can be used by:

- adult educators and trainers,
- social workers and caregivers,
- community organisations and NGOs,
- facilitators of workshops and informal learning activities,
- and older adults interested in self-directed learning.

Structure and Navigation

The guidebook is organised into three thematic sections, each addressing a key dimension of the BEEPGA approach. Within each theme, sections combine:

- conceptual explanations,
- evidence from research (focus groups and survey),
- and practical guidelines and tools.

Users are encouraged to:

- follow the guidebook sequentially for a comprehensive understanding, or
- select specific sections based on their needs, context, or target group.

Using the Guidelines in Practice

The recommendations provided throughout the guidebook can be:

- integrated into training programmes and workshops,
- adapted for local community initiatives,
- used to design learning activities and interventions,
- or applied in everyday practices supporting well-being and sustainability.

The included implementation checklists and examples are intended to support practical application, helping users translate concepts into concrete actions.

Adaptability and Contextualisation

While the guidebook is grounded in research conducted in Italy, Lithuania, and Greece, its content is designed to be adaptable to different cultural and organisational contexts. Users are encouraged to:

- adjust activities to local needs and capacities,
- consider participants' abilities and backgrounds,
- and tailor approaches to specific environmental and social conditions.

This guidebook should be understood not as a fixed model, but as a living resource—one that can evolve through practice, reflection, and continued engagement with communities working towards more sustainable and inclusive forms of aging.

Methodological Note: Data Sources and Approach

The development of this guidebook is grounded in a triangulated, mixed-methods research design, combining qualitative and quantitative data with established academic literature. This approach ensures that the guidelines are empirically grounded, theoretically informed, and practically relevant.

Qualitative Component: Focus Groups

A total of nine focus group interviews were conducted across Italy, Lithuania, and Greece, involving older adults (55+), adult educators, social workers, caregivers, and community members.

These discussions explored participants':

- understandings of green and healthy ageing,
- daily well-being and self-care practices,
- emotional responses to environmental and climate-related changes,
- motivations for learning and behaviour change,

- and perceived barriers to participation, including digital challenges.

The focus groups provided in-depth, context-sensitive insights, capturing lived experiences and social dynamics that cannot be fully understood through quantitative methods alone.

Quantitative Component: Online Questionnaire

The qualitative findings were complemented by a structured online questionnaire, co-designed with input from participants and distributed across partner countries.

The survey collected data from over 150 respondents across Italy, Lithuania, and Greece, enabling:

- identification of patterns in perceptions of green ageing and well-being,
- measurement of behaviours related to sustainability and self-care,
- assessment of environmental awareness and perceived health impacts,
- and analysis of learning needs, motivations, and barriers.

This quantitative layer allowed for cross-country comparison and validation of key themes emerging from the focus groups.

Integration with Academic Literature

In addition to empirical data, the guidebook is informed by relevant academic and policy literature in the fields of:

- healthy and active ageing,
- environmental psychology and nature-based health,
- ecosomatic and body-awareness practices,
- lifelong learning and adult education,
- and community-based well-being.

Academic sources are used to:

- strengthen conceptual clarity,
- situate the findings within broader research debates,

- and ensure alignment with European and international frameworks.

Theme 1 – Nurturing Green and Healthy Ageing for Well-being

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1. Introduction: The Meaning and Importance of Green Ageing

Ageing is increasingly understood as a multidimensional process shaped by biological, psychological, social, and environmental factors rather than as a purely chronological or medical phenomenon. Contemporary scholarship emphasises that ageing well depends not only on individual health behaviours, but also on social participation, environmental conditions, and access to supportive learning and community structures (WHO, 2015; Rowe & Kahn, 1997; Beard et al., 2016). This redefinition of healthy ageing is built upon three core pillars:

- **Functional Ability:** healthy ageing as the process of developing and maintaining the functional ability that enables well-being in older age. Functional ability is not just about what a person can do physically; it is the result of the interaction between an individual's internal strengths and the world they live in. It encompasses the attributes that allow people "to be and do what they have reason to value".
- **Intrinsic Capacity:** A key component of this new definition is intrinsic capacity, which is the composite of all the physical and mental capacities (including psychosocial) that a person can draw upon at any given time. While intrinsic capacity tends to decline gradually over a person's life course, this decline is not uniform; there is significant diversity in aging, where some 80-year-olds maintain capacities similar to much younger adults.
- **The Role of the Environment:** This redefinition acknowledges that an individual's health cannot be assessed in a vacuum. Environments—which include physical infrastructure, social relationships, and policy—can act as either resources or barriers. (WHO, 2015)

Empirical grounding: insights from the BEEPGA research

Findings from the BEEPGA focus group interviews and survey data confirm that participants' understandings of healthy and sustainable ageing are strongly rooted in autonomy, everyday

functionality, and emotional balance. Across Lithuania, Italy and Greece, survey respondents most frequently associated healthy ageing with remaining independent and self-sufficient (Lithuania: 84%; Italy: 60.8%; Greece: 56.9%) and maintaining a healthy lifestyle that supports physical and mental well-being (Lithuania: 72%; Italy: 74.5%; Greece: 68.6%). These findings resonate with established models of successful and active ageing, which identify functional ability and autonomy as central determinants of well-being in later life (WHO, 2015; Foster & Walker, 2015).

At the same time, both qualitative and quantitative data reveal a growing awareness of the environmental dimensions of aging well. Focus group participants across all partner countries explicitly described how climate-related changes—such as rising temperatures, irregular seasons, and pollution—affect their bodies, mobility, sleep, and emotional well-being. These experiences are reflected in survey results, where respondents reported increased health discomfort linked to heat, humidity, and environmental degradation. Such findings align with emerging research on climate change and ageing, which shows that older adults are disproportionately affected by environmental stressors due to physiological vulnerability and reduced adaptive capacity (Romanello et al., 2022; Watts et al., 2020).

From individual health to collective responsibility

Importantly, green ageing is not perceived by participants as an exclusively individual endeavour. Italian survey respondents, in particular, emphasised social connection, participation in community groups, and responsibility toward future generations as integral components of healthy ageing. Focus group discussions further highlighted that well-being is sustained through shared routines, mutual support, and collective engagement in meaningful activities. This reflects sociological and educational research that frames ageing as a relational and community-embedded process, rather than a private or isolated experience (Buffel, Phillipson & Scharf, 2012).

Conceptual definition used in this guidebook

Drawing on:

- focus group narratives,

- survey findings from Greece, Lithuania, and Italy,
- and established academic and policy frameworks,

this guidebook adopts the following working definition:

Green and healthy ageing refers to an integrated approach to ageing that supports physical, mental, and emotional well-being through sustainable daily practices, meaningful social participation, and a respectful relationship with the natural environment, recognising the interdependence between individual health, community resilience, and planetary well-being.

For adult educators working with adults over 55, ageing should be understood as shaped by health, environment, and social context. Supporting well-being means addressing not only individual behaviours, but also the conditions that enable participation.

Implications for adult education practice

- frame healthy ageing as a combination of autonomy, environment, and social participation, not just individual health;
- design learning activities that support functional ability (mobility, daily routines, decision-making);
- recognise that learners' capacities vary widely—avoid one-size-fits-all expectations;
- integrate environmental context (housing, neighbourhood, access to services) into discussions of well-being;
- position learning spaces as supportive environments, not only knowledge-delivery settings.

Together, these sections build a comprehensive, evidence-informed foundation for training, workshops, and community initiatives developed within the BEEPGA project.

2. Understanding Green Ageing: Awareness, Meaning, and Lived Experience

Green ageing is increasingly recognised as a concept that extends beyond individual health behaviours to include environmental awareness, sustainable daily practices, and collective

responsibility. While policy frameworks and academic literature often define green or sustainable ageing in abstract terms, the BEEPGA research highlights the importance of grounding this concept in the lived experiences, emotions, and everyday realities of older adults and adult educators. This section explores how green ageing is understood by participants, how awareness is shaped by personal and environmental change, and how meaning is constructed through daily life.

Awareness of Green Ageing among Participants

Findings from both the focus group interviews and the online questionnaires indicate that awareness of green ageing is present but unevenly articulated. Survey respondents in Lithuania, Italy and Greece demonstrated a strong intuitive understanding of the relationship between ageing well and living sustainably, even when they did not explicitly use the term “green ageing”.

Quantitative data show that respondents primarily associate green ageing with:

- maintaining a healthy lifestyle (Lithuania: 72%; Italy: 74.5%; Greece: 68.6%);
- remaining independent and self-sufficient (Lithuania: 84%; Italy: 60.8%; Greece: 56.9%);
- healthy eating, use of natural products, and waste reduction (Lithuania: 54%; Italy: 62.7%; Greece: 47.1%).

These results suggest that green ageing is initially perceived through personal capacity and bodily autonomy, rather than through abstract environmental discourse. Focus group participants confirmed this pattern, often describing green ageing in practical terms such as “being able to take care of myself”, “not depending on others”, or “staying active despite changes around us”.

“Healthy aging means staying strong enough to take care of myself, without asking others.”
(focus group participant from Lithuania)

Environmental considerations emerged gradually in conversation, particularly when participants reflected on changes in climate, neighbourhoods, or access to natural spaces.

“Green ageing sounds nice, but I mostly just separate my waste and grow vegetables.” (focus group participant from Lithuania).

This aligns with research showing that environmental awareness among older adults is frequently embedded in everyday practices rather than framed as ideological or activist engagement (Hitchings, 2013; Rowles & Bernard, 2013).

Green Ageing as a Response to Environmental and Climate Change

Both qualitative and quantitative data reveal that participants’ understanding of green ageing is increasingly shaped by lived experiences of environmental and climate-related change. 60% of the survey respondents in Lithuania and 66.7% in Greece reported that rising temperatures, irregular seasons, and increased humidity directly affect their physical comfort and health, while more than half reported worsening chronic health conditions linked to environmental factors (Lithuania 54%; Greece: 62.7%). Italian respondents similarly described climate-related stressors, although these were often expressed in emotional or relational terms during focus groups.

Focus group participants across partner countries described:

- difficulties sleeping during heatwaves

“The summers are getting hotter every year, and it is hard for older people to cope.” (focus group participant from Lithuania).

- reduced mobility during extreme weather

“In winter, I am afraid to go out when the streets are icy.” (focus group participant from Lithuania).

- increased fatigue and joint pain related to humidity,
- emotional distress linked to environmental degradation and uncertainty.

These narratives demonstrate that green ageing is not perceived as an abstract sustainability goal, but as a practical and adaptive response to changing environmental conditions. This supports existing evidence that older adults are disproportionately affected by climate change due to

physiological vulnerability, social inequalities, and reduced adaptive capacity (Romanello et al., 2022; WHO, 2015).

Daily Practices as the Core of Green Ageing

Across all data sources, green ageing was most clearly articulated through daily practices rather than abstract values. Survey results show that outdoor activities are the most common form of physical and emotional self-care (Lithuania: 90%; Italy: 86.3%; Greece: 88.2%). Activities such as walking, gardening, swimming, cycling, and dancing were repeatedly mentioned in both questionnaires and focus groups.

Participants also highlighted:

- home-based activities (reading, handicrafts, listening to music or podcasts); healthy eating and avoidance of processed foods (Lithuania: 74%; Italy: 66.7%; Greece: 66.7%);
- simple relaxation practices (more prominent in Italy: 47.1%).

These practices illustrate that green ageing is enacted through low-cost, accessible, and often informal routines that combine bodily movement, mental restoration, and contact with nature.

Emotional Dimensions of Awareness and Motivation

Focus group discussions revealed that awareness of green ageing is closely tied to emotional responses. Participants expressed concern, anxiety, and sometimes grief related to environmental change, but also pride, hope, and a sense of responsibility toward future generations. Italian and Greek survey data particularly highlighted the importance of social connection and intergenerational responsibility (Italy 56.9%; Greece: 70.6%), suggesting that green ageing is linked to meaning-making beyond the self.

This emotional dimension is crucial. Research on environmental psychology indicates that emotional engagement plays a key role in motivating sustainable behaviour, especially when individuals feel connected to others and to place (Clayton, 2020). For older adults, this connection often emerges through caregiving roles, community participation, and concern for children and grandchildren.

For adult educators working with adults over 55, green ageing should be introduced through everyday experiences rather than abstract concepts. Building on existing habits and acknowledging emotional responses supports engagement.

Implications for adult education practice

- start from participants' existing habits and daily practices, not abstract sustainability concepts;
- use simple, relatable language instead of technical terms like “green ageing”;
- connect climate and sustainability topics to bodily experience (heat, sleep, mobility, fatigue);
- acknowledge emotional responses (concern, frustration) and create space to express them;
- emphasise small, achievable actions to strengthen motivation and sense of agency.

Adult education research emphasises that learning in later life is most effective when it is experiential, relational, and connected to learners' identities and everyday contexts (Field, 2006; Formosa, 2019). The BEEPGA findings strongly support this approach, indicating that green ageing education should be grounded in lived experience rather than abstract instruction.

3. Ecosomatic Awareness and the Body–Environment Relationship in Green Ageing

Green ageing is not only a cognitive or behavioural process; it is fundamentally embodied. Ecosomatic awareness, understood as the integration of bodily perception with ecological awareness, offers a conceptual and practical framework for understanding how older adults experience, interpret, and respond to their environments through their bodies. This section explores ecosomatic awareness as a core dimension of green ageing, drawing on BEEPGA research findings and interdisciplinary academic literature.

Conceptualising Ecosomatic Awareness in Later Life

The term *ecosomatic* combines greek terms *soma* (the lived, felt body) and *ecology* (the interrelationship between living beings and their environments). Ecosomatic approaches emphasise that the body is not separate from its surroundings but continuously shaped by

environmental conditions such as air quality, temperature, light, sound, and access to natural spaces (Abram, 1996).

In the context of green ageing, ecosomatic awareness refers to the capacity of older adults to:

- perceive bodily sensations in relation to environmental conditions,
- recognise how nature supports physical and emotional regulation,
- adapt movement, rest, and routines in response to ecological change,
- develop care-oriented relationships with the natural environment.

Empirical Insights from the BEEPGA Focus Groups and Surveys

BEEPGA focus group participants frequently described bodily awareness as central to how they experience both aging and environmental change. Across Lithuania, Italy, and Greece, participants spoke about “listening to the body”, “feeling changes in the air”, and “adjusting activities according to the weather”. These narratives illustrate a form of embodied environmental literacy developed through lived experience rather than formal education.

Survey data strongly reinforce this finding. Outdoor activities, such as walking, gardening, swimming, or light exercise, were reported as the most common well-being practices (Lithuania: 90%; Italy: 86.3%; Greece: 88.2%). Participants often framed these activities not only as physical exercise but as opportunities to “breathe better”, “clear the mind”, and “feel connected to nature”.

Focus group discussions further revealed that:

- bodily discomfort (e.g. fatigue, joint pain, sleep disturbance) is often linked to heat, humidity, or pollution;
- natural environments are perceived as restorative and regulating;
- indoor confinement, particularly during extreme weather or health limitations, is associated with emotional distress.

The Body as a Site of Environmental Knowledge

An important insight emerging from the focus groups is that older adults often hold *tacit ecological knowledge* grounded in bodily memory. Participants recalled seasonal rhythms, traditional food practices, and ways of moving that are no longer fully aligned with contemporary urban or digital lifestyles.

This embodied knowledge functions as:

- a resource for adaptive coping,
- a basis for intergenerational learning,
- a motivational anchor for sustainable behaviour.

Ecosomatic Practices as Tools for Green Ageing

Both the literature and the BEEPGA data suggest that ecosomatic practices are especially suitable for inclusive, low-threshold green ageing initiatives. Such practices may include:

- slow walking with sensory attention,
- gentle stretching or chair-based movement in natural or semi-natural settings,
- breathing exercises linked to environmental awareness,
- mindful observation of seasonal change,
- creative activities inspired by natural elements (drawing, writing, sound).

Italian survey results indicate that relaxation practices such as yoga, meditation, or breathing exercises are already present (47.1%) but not yet systematic. Focus group participants expressed openness to guided practices, provided they are non-competitive, adaptable, and socially supportive.

Academic research confirms that mindful movement and body-based practices can enhance balance, mobility, emotional regulation, and self-efficacy among older adults, while also strengthening environmental connectedness (Kabat-Zinn, 2003; Payne, 1997).

Addressing Barriers through Ecosomatic Approaches

Ecosomatic awareness also offers strategies for addressing barriers identified in the BEEPGA research. Time constraints, low motivation, health limitations, and environmental stressors were consistently reported across survey and focus group data. Ecosomatic practices can respond to these challenges by:

- requiring minimal equipment and financial resources,
- being adaptable to different physical abilities,
- integrating into existing routines,
- emphasising self-compassion rather than performance.

By framing well-being practices as moments of awareness rather than obligations, ecosomatic approaches reduce psychological resistance and support sustainable engagement—an essential principle for green ageing initiatives targeting diverse and potentially vulnerable populations.

For adult educators working with adults over 55, bodily awareness is a key entry point for learning. Simple, adaptable practices can support both well-being and environmental connection.

Implications for adult education practice

- integrate simple body-based practices (breathing, stretching, mindful walking) into sessions;
- encourage participants to notice and reflect on bodily sensations related to the environment;
- use nature-based settings or examples whenever possible;
- offer flexible participation (sitting, moving, resting) to accommodate different abilities;
- avoid performance-oriented activities—prioritise comfort, safety, and self-awareness.

This approach aligns with person-centred, inclusive educational models and supports the broader project objective of enhancing well-being, environmental responsibility, and resilience in later life.

4. Daily Sustainable Practices for Green Ageing and Well-Being

This section examines daily sustainable practices as the practical interface between individual well-being, environmental responsibility, and social participation. Drawing on BEEPGA focus group narratives, survey data, and academic literature, it highlights how small, habitual actions can cumulatively support health, autonomy, and ecological sustainability in later life.

Everyday Practices as Foundations of Green Ageing

Research on healthy and active ageing increasingly emphasises the importance of daily routines in maintaining functional ability, emotional balance, and a sense of purpose (WHO, 2015; Beard et al., 2016).

BEEPGA focus group participants consistently framed well-being not in terms of exceptional interventions, but through “ordinary” activities such as walking, cooking, gardening, caring for others, or spending time outdoors.

“It is easy to say ‘stay active,’ but after work and housework, I don’t have energy.” (focus group participant from Lithuania).

Survey data confirms this orientation: across all countries, outdoor activities and simple lifestyle practices were the most frequently reported strategies for physical and emotional well-being.

Movement and Physical Activity in Sustainable Contexts

Physical movement emerged as the single most significant well-being practice across BEEPGA partner countries. Outdoor activities were reported by 90% of Lithuanian respondents, 88.2% of Greeks and 86.3% of Italian respondents, making them a cornerstone of both health maintenance and environmental engagement.

Focus group discussions revealed that participants value movement that is:

- integrated into daily life,
- adapted to physical capacity,
- socially meaningful,
- connected to nature.

Examples included walking with friends or pets, gardening, cycling, dancing, swimming, and light stretching outdoors.

From a green ageing perspective, outdoor movement also:

- reduces reliance on energy-intensive indoor facilities,
- fosters awareness of seasonal and environmental change,
- strengthens emotional attachment to local environments.

Academic studies confirm that physical activity undertaken in natural settings (“green exercise”) offers additional psychological benefits compared to indoor exercise, including stress reduction and improved mood (Pretty et al., 2005; Hartig et al., 2014).

Nutrition, Food Practices, and Environmental Responsibility

Food practices represent a critical intersection between personal health and planetary well-being. In all countries, a majority of survey respondents associated green ageing with healthy eating, use of natural products, and reduction of waste (Lithuania: 54%; Greece : 68.6%; Italy: 62.7%).

Focus group participants frequently linked food choices to:

- bodily comfort and energy levels,
- cultural traditions and memory,
- affordability and access,
- ethical and environmental concerns.

For older adults, food preparation also serves social and emotional functions. Shared meals, cooking for family members, or participating in community food initiatives were described as sources of connection and meaning—an insight supported by gerontological research on commensality and social well-being (Sobal & Nelson, 2003).

Rest, Recovery, and Energy Management

Although less visible than movement or nutrition, rest and recovery were frequently mentioned in focus group narratives, particularly in relation to fatigue, sleep disruption, and climate-related discomfort (e.g. heat waves, humidity).

Older adults described adjusting daily rhythms in response to bodily signals and environmental conditions, such as:

- resting during hot periods,
- limiting exposure during extreme weather,
- creating calming routines in the evening.

From a green ageing perspective, rest is also linked to sustainability through:

- reduced overconsumption,
- mindful use of digital devices,
- attention to indoor environmental quality (ventilation, light, noise).

Social and Relational Practices in Everyday Life

Social connection is a decisive factor in healthy ageing and emerged strongly in Italian survey data, where maintaining social connections and participating in groups were identified as core components of green and healthy ageing (60.8% ; Greece :70,6%).

Focus group participants emphasised that daily well-being practices are more sustainable when embedded in relationships. Walking groups, shared meals, informal caregiving, volunteering, and community activities were frequently mentioned as ways of combining movement, purpose, and social interaction.

Digital Practices and Sustainable Daily Living

Although digital literacy is addressed more explicitly in other themes of the guidebook, daily digital practices intersect directly with green ageing. Focus group participants described ambivalent relationships with digital technologies: while they facilitate communication and

access to services, they can also contribute to stress, sedentary behaviour, and information overload.

Survey data indicates varying levels of digital confidence, particularly among adults aged 55+, highlighting the importance of moderation and boundary-setting. Sustainable digital practices discussed include:

- limiting screen time,
- using digital tools purposefully,
- combining online and offline social interaction,
- accessing reliable information related to health and environment.

Academic research on digital well-being supports the importance of intentional, reflective technology use, particularly in later life (Helsper & Reisdorf, 2016).

Barriers to Sustaining Daily Practices

Despite strong engagement with sustainable routines, BEEPGA data reveals significant barriers. Across all countries, participants reported:

- lack of time due to work or caregiving

“It must be close by and free of charge – otherwise many simply won’t come.” (focus group participant from Lithuania).

- physical or health-related limitations,
- low motivation or fatigue,
- financial constraints.

These barriers underscore that green ageing practices cannot be framed solely as individual responsibility. Structural conditions—such as access to green spaces, affordable food, safe environments, and supportive community infrastructure—play a decisive role.

For adult educators working with adults over 55, daily routines are the most effective foundation for behaviour change. Activities should be realistic, flexible, and integrated into everyday life.

Implications for adult education practice

- build learning around everyday routines (walking, cooking, socialising), not separate “programmes”;
- highlight and validate what participants already do well;
- promote low-cost, low-effort practices that fit into daily life;
- combine health, sustainability, and social interaction in activities;
- adapt timing and intensity of activities to energy levels, fatigue, and responsibilities.

Daily sustainable practices are therefore not ancillary but foundational to green ageing. They offer a realistic, inclusive pathway for promoting well-being and environmental responsibility among diverse adult populations.

5. Environmental Awareness, Nature Connection, and Green Ageing

Environmental awareness and connection to nature are central dimensions of green ageing. Beyond ecological knowledge, they shape how individuals relate to place, time, responsibility, and intergenerational continuity. This section examines how environmental awareness contributes to well-being in later life, drawing on BEEPGA data and interdisciplinary research in environmental psychology, gerontology, and public health.

Environmental Awareness as a Component of Green Ageing

Green ageing conceptualises ageing as a process embedded in ecological systems, recognising that individual well-being is inseparable from environmental health. In the BEEPGA survey, a substantial proportion of respondents associated green ageing with sustainable living, environmental responsibility, and conscious use of resources.

Focus group discussions revealed that participants often framed environmental awareness not as activism, but as *care*: care for local surroundings, future generations, and one’s own health.

Many participants described sustainability as “common sense” or “how we were taught to live,” reflecting values shaped by life experience, scarcity, and cultural norms.

Nature Connection and Well-Being in Later Life

Connection to nature emerged as a powerful contributor to emotional balance and quality of life. Focus group participants consistently highlighted the importance of:

- spending time in green spaces,
- observing seasonal change,
- gardening or caring for plants,
- proximity to parks, forests, or water.

Survey data reinforces this finding, with outdoor activities ranking among the most frequently practiced well-being strategies across all countries.

According to the World Health Organization, access to urban green spaces contribute to lower levels of depression and improve cognitive functions, which are vital for mental clarity and daily performance. Particularly for older residents who may be at risk of isolation, green spaces provide a venue for social interaction, exchange, and community participation, which are linked to higher life satisfaction and quality of life.

Urban green spaces should therefore be planned and designed in a flexible way to cater to the elderly through specific "tailored" functions while remaining inclusive of the whole community.

Communities can enhance this social connectivity in different ways:

- **Active Recreation:** supporting "gentle" active lifestyles, such as guided walks, which help maintain physical fitness and immune function in older age.
- **Community Engagement:** Involving elderly residents in the planning and maintenance of these spaces can increase their sense of ownership and encourage regular use. (WHO, 2017)

Environmental Practices and Everyday Sustainability

Participants described a range of everyday environmental practices, including:

- waste reduction and recycling,
- energy and water conservation,
- reuse and repair of household items,
- preference for local or seasonal products.

These practices were often motivated by habit, frugality, or moral responsibility rather than environmental discourse. Importantly, focus group data indicates that participants viewed such behaviours as *part of a good life*, not as sacrifices.

Environmental Stressors and Ageing

While nature and sustainability were primarily associated with positive outcomes, participants also expressed concern about environmental stressors, including:

- air pollution,
- urban noise,
- extreme weather events,
- reduced access to green spaces.

These concerns were particularly salient among participants with chronic health conditions or limited mobility. Climate-related challenges such as heat waves were mentioned as increasingly disruptive to daily routines and well-being.

Environmental Awareness, Agency, and Meaning

Environmental engagement was also described as a source of agency and purpose. Participants expressed satisfaction in “doing their part,” teaching younger generations, or contributing to community initiatives such as clean-up activities or shared gardens. Green ageing reframes environmental responsibility as an opportunity for active participation rather than moral obligation.

Barriers to Environmental Engagement

Despite positive attitudes, participants identified several barriers to environmental engagement:

- lack of accessible green spaces,
- physical limitations,
- insufficient public infrastructure,
- feeling excluded from environmental decision-making.

These barriers highlight the importance of inclusive design and policy approaches that enable older adults to participate in environmental practices without excessive physical, financial, or cognitive burden.

For adult educators working with adults over 55, environmental awareness is best approached through local context and personal meaning. Framing sustainability as care encourages lasting engagement.

Implications for adult education practice

- frame environmental awareness as care for self, others, and place, not activism;
- use local examples and familiar environments to discuss sustainability;
- encourage nature-based activities (walking, gardening, observation);
- avoid guilt-based messaging—focus on positive and meaningful engagement;
- support participants in connecting environmental practices to their own life history and values.

Guidelines should therefore prioritise practical, locally relevant actions and emphasise the mutual benefits of environmental care and personal health.

6. Motivation, Self-Compassion, and Empowerment in Green Ageing

Green ageing is not sustained solely through knowledge or awareness; it depends critically on motivation, emotional resources, and a sense of personal agency. Findings from the BEEPGA focus groups and questionnaires indicate that older adults' engagement in green and sustainable

practices is strongly influenced by how achievable, meaningful, and emotionally supportive these practices feel in daily life.

Across focus groups, participants frequently expressed ambivalence toward environmental responsibility. While many recognised the importance of sustainable living, some also reported feelings of guilt, fatigue, or helplessness in relation to climate change.

“Technology is supposed to make life easier, but often it just frustrates me...” (focus group participant from Lithuania).

This emotional burden, fear or worry caused by environmental change—sometimes described as “eco-anxiety”—was particularly evident when participants felt that individual actions were insignificant compared to global environmental problems.

Motivation as a relational and contextual process

Survey results show that respondents were more motivated to adopt green practices when these actions were embedded in familiar routines, social relationships, or community-based activities. In the context of green ageing, motivation increases when older adults feel that sustainable practices:

- are compatible with their physical capacities,
- respect their lived experience,
- contribute to shared social goals rather than isolated individual responsibility.

Focus group participants repeatedly stressed that encouragement from peers, family members, or community facilitators played a decisive role in sustaining behavioural change.

Empowerment through learning and agency

Both focus group discussions and questionnaire responses highlight learning as a key pathway to empowerment. Participants reported greater confidence and willingness to engage in green practices when they understood *why* certain actions mattered and *how* these actions could be adapted to their own circumstances.

This finding aligns with adult learning theory, which emphasises experiential learning, relevance, and agency as core principles for effective education in later life (Knowles et al., 2015). Empowerment in green ageing is not achieved through information transfer alone, but through participatory learning environments where older adults are recognised as knowledgeable contributors rather than passive recipients.

From this perspective, green ageing becomes a process of co-learning, where environmental responsibility, personal well-being, and social inclusion are mutually reinforcing.

For adult educators working with adults over 55, motivation depends on feeling capable and supported. Small, meaningful actions and social encouragement strengthen engagement.

Implications for adult education practice

- focus on encouragement rather than obligation when discussing sustainable behaviour;
- break down actions into small, manageable steps;
- reinforce participants' sense of contribution and usefulness;
- use peer support and group dynamics to maintain motivation;
- link learning to real-life relevance and personal meaning.

7. Barriers, Inequalities, and Structural Constraints in Green Ageing

While green ageing is widely recognised by participants as desirable and meaningful, the BEEPGA research clearly demonstrates that engagement in green ageing practices is uneven and shaped by structural, social, and personal constraints. Both focus group discussions and survey responses reveal that inequalities related to health, income, education, digital access, and living environments significantly affect older adults' capacity to adopt and sustain environmentally friendly and well-being-oriented practices.

Physical and health-related barriers

Focus group participants frequently highlighted physical limitations—such as reduced mobility, chronic pain, fatigue, and heat sensitivity—as barriers to participation in outdoor activities, active transport, or community-based green initiatives. Survey respondents similarly reported

that environmental stressors, including heatwaves and poor air quality, intensified existing health conditions and restricted daily functioning.

These findings are consistent with public health research showing that older adults are disproportionately affected by environmental stress due to age-related physiological vulnerability and higher prevalence of chronic conditions (Kenny et al., 2010; Romanello et al., 2022). While green spaces and outdoor activity are associated with health benefits, unequal access and differing physical capacities can transform these potential resources into sources of exclusion if not carefully adapted.

Green ageing guidelines must therefore recognise that “one-size-fits-all” approaches risk marginalising those with greater health needs.

Socio-economic inequalities and access to resources

Economic constraints emerged as a significant theme, particularly in discussions around sustainable consumption, energy-efficient housing, and access to healthy food. Participants noted that environmentally friendly options are often perceived as costly or inaccessible, especially for individuals living on fixed or limited incomes.

Survey data corroborated this concern, with respondents expressing willingness to adopt green practices but uncertainty about affordability.

This tension underscores an important insight: green ageing cannot rely solely on individual responsibility. Structural support, policy alignment, and community-level solutions are essential to avoid reinforcing social inequalities.

Digital exclusion as a compounding barrier

The BEEPGA questionnaires explicitly addressed digital literacy, revealing marked differences in confidence and access among older adults. Focus group participants described digital tools as potentially empowering, especially for accessing information, services, and social connections, but also as sources of frustration, anxiety, and exclusion.

“I use my phone daily, but I get lost when apps change.” (focus group participant from Lithuania).

Digital exclusion intersects with green ageing in multiple ways: access to environmental information, public services, mobility solutions, and community initiatives increasingly depends on digital platforms.

Environmental and spatial inequalities

Living environments strongly shaped participants’ experiences of green ageing. Urban focus group participants emphasised traffic pollution, lack of accessible green spaces, and noise as barriers to well-being, while rural participants highlighted isolation, limited public transport, and reduced access to services.

These spatial inequalities are well documented in urban and environmental gerontology, which shows that neighbourhood design, infrastructure, and environmental quality significantly influence ageing experiences (Buffel et al., 2012; WHO, 2017).

For adult educators working with adults over 55, barriers such as health, cost, and access must be recognised. Inclusive approaches are essential for meaningful participation.

Implications for adult education practice

- identify and address practical barriers (cost, transport, health limitations);
- offer accessible formats (local, free, easy to attend);
- adapt activities to different physical and cognitive abilities;
- provide additional support for digitally excluded participants;
- involve participants in co-designing activities to ensure relevance and inclusion.

By acknowledging barriers rather than obscuring them, green ageing can evolve into a genuinely inclusive framework that supports dignity, participation, and well-being across diverse ageing trajectories.

8. Daily Green Ageing Practices and Ecosomatic Integration

The BEEPGA research highlights that participants overwhelmingly associate well-being and sustainability with simple, embodied routines embedded in daily life. These findings point toward the importance of ecosomatic practices—approaches that integrate bodily awareness, emotional regulation, and environmental connection—as a practical foundation for green ageing.

Everyday practices as the foundation of green ageing

Survey results from all countries indicate that the most commonly practised well-being activities are low-threshold, familiar, and accessible. Outdoor movement—such as walking, gardening, swimming, and light exercise—was the most frequently reported activity supporting physical and mental well-being. Focus group participants consistently described these practices not as “health interventions” but as habits that provide rhythm, meaning, and a sense of continuity in everyday life.

Ecosomatic awareness and the body–environment relationship

Focus group discussions revealed a strong embodied awareness of environmental conditions. Participants spoke about feeling climate change “in the body”—through heat intolerance, fatigue, disrupted sleep, joint pain, or breathing difficulties. These experiences underscore the relevance of ecosomatic approaches, which recognise the body as both a biological and ecological entity embedded within wider environmental systems.

Ecosomatic theory draws on somatic psychology, environmental education, and embodied cognition, emphasizing that bodily sensations can serve as meaningful signals of environmental stress and well-being (Payne, 1997; Abram, 1996). In the context of green ageing, ecosomatic practices—such as mindful movement, breathing, sensory engagement with nature, and gentle body awareness—support adaptive responses to environmental change while enhancing self-regulation and resilience.

Nature-based practices and emotional regulation

Both survey and focus group data show that nature contact plays a central role in emotional well-being. Participants described spending time outdoors as calming, grounding, and restorative, particularly in relation to stress, anxiety, and feelings of uncertainty associated with

climate and social change. Gardening, walking in green spaces, and being near water were repeatedly mentioned as accessible and meaningful practices.

Importantly, BEEPGA participants emphasised that nature-based practices were most beneficial when they were voluntary, pleasurable, and socially shared, rather than framed as obligations or prescriptions.

Sustainable self-care and mindful consumption

Green ageing practices also extend to food choices, consumption habits, and resource use. Survey respondents frequently associated healthy ageing with home cooking, reduced food waste, use of natural products, and moderation rather than restriction. Focus group discussions framed these behaviours as expressions of care for oneself, for others, and for future generations.

For adult educators working with adults over 55, combining body awareness with daily practices supports sustainable engagement. Simple, repeatable actions are more effective than intensive interventions.

Implications for adult education practice

- combine body awareness, sustainability, and daily routines into integrated activities;
- use short, repeatable practices that participants can continue independently;
- encourage sensory engagement with the environment (breathing, noticing, slowing down);
- support continuity rather than intensity in behaviour change;
- frame sustainability as self-care and regulation, not effort or sacrifice.

By grounding green ageing in everyday practices, the guidebook can support long-term engagement, autonomy, and adaptability across diverse ageing experiences.

9. Motivation, Self-Compassion, and the Psychological Dimensions of Green Ageing

Green ageing is shaped not only by knowledge and skills but also by psychological resources such as motivation, emotional regulation, self-efficacy, and self-compassion. Findings from the BEEPGA research demonstrate that participants' engagement with green and healthy practices is

strongly influenced by how they perceive themselves, their capacities, and their sense of agency in a rapidly changing world.

Motivation as a relational and contextual process

Survey findings across partner countries indicate that lack of motivation is one of the most frequently reported barriers to maintaining well-being and sustainable practices, alongside time constraints, fatigue, and financial limitations. Focus group participants further clarified that motivation fluctuates in response to life circumstances, health status, social support, and perceived relevance of activities.

From a green ageing perspective, motivation emerges when practices resonate with personal values, daily realities, and emotional needs.

Climate-related emotions and ageing

Focus group discussions revealed a complex emotional landscape surrounding climate change. Participants expressed concern, sadness, frustration, and sometimes helplessness when discussing environmental degradation and uncertainty about the future. These emotions were often intertwined with bodily sensations such as fatigue, tension, or sleep disturbance.

Psychological literature increasingly recognises climate-related distress, often referred to as eco-anxiety, as a legitimate emotional response, particularly among populations who perceive limited control over systemic change (Clayton, 2020). This suggests that green ageing initiatives must address emotional processing alongside behavioural change.

The role of self-compassion in sustainable behaviour

Focus group narratives frequently reflected harsh self-judgement, particularly around perceived “failures” to live sustainably or maintain healthy routines. Participants described feeling guilty for not doing “enough,” whether due to health limitations, financial constraints, or lack of energy.

Self-compassion research demonstrates that individuals who respond to challenges with kindness and understanding—rather than self-criticism—are more likely to sustain health-promoting behaviours over time (Neff, 2011; Sirois et al., 2015). In the context of green ageing,

self-compassion enables older adults to adapt practices to changing capacities without disengaging entirely. Embedding self-compassion into green ageing education shifts the focus from perfection to continuity, supporting realistic, adaptive engagement with sustainability and well-being.

Empowerment, agency, and meaningful contribution

Despite acknowledging barriers, many focus group participants emphasised a desire to remain useful, informed, and contributive members of society. Survey findings further indicate that participants value autonomy and independence as core components of healthy and green ageing.

Green ageing initiatives that position older adults as learners, co-creators, and knowledge holders, rather than passive recipients, are more likely to foster sustained motivation and engagement.

For adult educators working with adults over 55, emotional responses should be recognised as part of engagement. Supporting self-compassion and agency helps sustain participation over time.

Implications for adult education practice

- normalise feelings such as fatigue, guilt, or helplessness related to climate and ageing;
- integrate reflection and discussion spaces into learning activities;
- promote self-compassion as part of sustainable behaviour change;
- avoid perfection-based expectations—support flexible, adaptive engagement;
- highlight participants as knowledge holders and contributors, not just learners.

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Theme 2 – Awareness and Attitudes Toward the Climate Crisis

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1. Introduction: The Climate Crisis and Its Impact on Health and Ageing

Climate change is experienced primarily as a lived and embodied reality, not as abstract knowledge (Figueiredo et al., 2024; Sadana et al., 2024). Across all partner countries, participants, primarily adults over 55, show high awareness of the climate crisis, yet describe it mainly through concrete experiences affecting their bodies, routines, and sense of stability, rather than through scientific or media narratives. In the questionnaires, a clear majority of respondents, between 60% and 67%, reported perceiving climate change through changes in their daily environment and bodily well-being rather than through abstract information.

The body acts as the first interface of environmental change. Physical sensations such as fatigue, pain, breathlessness, and reduced energy signal climate-related stress before it is cognitively processed. Ageing bodies, particularly in later adulthood (55+), often amplify these signals, making environmental change immediately perceptible. *“I notice the changes first in my body, especially the tiredness and the lack of energy during very hot periods.”* (Focus group participant from Italy)

Emotional responses reflect adaptation rather than resistance (Pihkala, 2020; Clayton et al., 2017). Feelings of anxiety, frustration, or withdrawal emerge as responses to uncertainty and limited control, and should be understood as part of lived experience rather than disengagement.

For adult education, bodily and emotional responses among adults over 55 offer key entry points for learning. Taken together, these insights suggest that climate-related learning initiatives benefit from starting from embodied and emotional experience, acknowledging physical limits, and creating learning spaces that are respectful, paced, and supportive.

2. How Environmental Change Affects Daily Life and Well-being

Environmental change reshapes daily routines and mobility patterns. Extreme temperatures and seasonal instability influence decisions about leaving the house, walking, or engaging in outdoor activities, directly affecting autonomy and daily structure. While the specific challenges varied across partner regions, from prolonged heatwaves to increasing seasonal unpredictability, participants consistently described similar impacts on their daily routines and mobility. In the questionnaires, rising temperatures and irregular seasons were identified as major environmental concerns by 62.7% of respondents in Italy and 60% of respondents in Lithuania.

For example, participants in Italy frequently referred to the impact of intense summer heat, which makes walking during the day more difficult and requires adjusting daily schedules or limiting outdoor activities. Several participants described avoiding midday hours and preferring early morning or evening walks. In Greece, discussions often highlighted longer periods of heat and dryness, which influence both mobility and outdoor social life. Participants explained that extreme heat sometimes discourages participation in community activities or daily errands. Participants in Lithuania, on the other hand, more often referred to increasing seasonal instability, including sudden weather changes or colder and wetter conditions that affect walking routines and time spent outdoors. Despite these regional differences, participants across all countries described a similar need to continuously adapt daily habits in response to changing environmental conditions.

Reduced outdoor engagement impacts both physical and emotional well-being. In the questionnaires, more than half of the participants reported limiting outdoor activities during periods of extreme heat or cold. These limitations are associated with increased fatigue, pain, and lower motivation, often accompanied by frustration or discouragement. Staying indoors or reducing activity commonly reflects responses to exhaustion, discomfort, or fear of injury rather than a lack of motivation (Sadana et al., 2024). *“When the weather is extreme, I prefer to stay inside. I feel less able to move as I used to.”* (Focus group participant from Greece)

From an ecosomatic perspective, these behaviours are guided by bodily limits rather than choice. Staying indoors or reducing activity commonly reflects responses to exhaustion, discomfort, or fear of injury, rather than a lack of interest or motivation. Continuous adaptation

may gradually reduce energy for participation. Ongoing adjustments to routines can limit availability for social and educational activities over time.

For adult educators working with adults over 55, recognising everyday constraints is essential. Reduced participation should be read as an adaptive response rather than disengagement.

Implications for adult education practice

- Adapt timing, duration, and format of activities to seasonal and climatic conditions.
- Offer flexible participation options and pacing.
- Avoid interpreting reduced attendance as disengagement.

3. Recognizing Local Climate Impacts and Community Responses

Climate change becomes meaningful when it is experienced in familiar places. Participants recognise environmental change primarily through their immediate surroundings rather than through global narratives. Across different local contexts, changes in familiar landscapes, seasons, and neighbourhood environments served as key reference points for noticing and understanding climate change. In the questionnaires, 62.7% of respondents in Italy and 60% in Lithuania identified rising temperatures and irregular seasonal patterns as visible signs of climate change affecting their local environments.

For example, several participants described noticing climate change through shifts in seasonal patterns that affect everyday activities such as gardening, walking routes, or outdoor social gatherings. In one focus group, a participant explained that the unpredictability of seasonal cycles had become particularly visible in their local area. *“We see the changes here, in our own area. Seasons are no longer predictable.”* (Focus group participant from Greece)

Place-based experiences intensify both awareness and emotional involvement. Focus group discussions across partner countries highlighted that local landscapes are closely connected to memory, identity, and belonging, making environmental change personally significant rather than abstract.

In several groups, participants described spontaneous conversations with neighbours or peers about weather changes, gardening difficulties, or altered walking routes as moments of shared recognition and mutual support. Outdoor and community-based activities were also identified as important well-being practices by 86.3% of respondents in Italy and 90% in Lithuania, reinforcing the strong connection between local environments, social interaction, and everyday well-being.

Local knowledge functions as a key adaptive resource. Participants described drawing on long-term familiarity with their local environment to adapt everyday practices, such as changing walking routes or schedules, adjusting gardening activities, or anticipating weather-related challenges based on past experience, rather than relying on formal guidance.

Community responses emerge through relationships rather than formal structures. Instead of organised programmes, participants most often referred to informal exchanges, neighbourly support, and shared problem-solving such as checking on each other during extreme weather or exchanging practical advice as key sources of resilience.

For adult education working with older learners (55+), place-based learning offers a powerful entry point for engagement.

Implications for adult education practice

- Start learning processes from local experiences and environments.
- Encourage storytelling and sharing of place-based knowledge.
- Value informal community practices as legitimate learning resources.

4. The Role of Older Adults as Environmental Stewards

Older adults practise environmental stewardship through everyday acts of care. Across focus groups, participants described environmental responsibility primarily through daily practices such as caring for their home, neighbourhood, or nearby natural spaces, rather than through formal climate action or activism. While these practices took different forms depending on local living conditions, they consistently reflected shared values of responsibility, continuity, and belonging rooted in lived experience rather than abstract environmental discourse. In the

questionnaires, a majority of respondents across partner countries reported already engaging in simple sustainable practices such as recycling, reducing waste, walking more, or caring for gardens and local outdoor spaces.

Environmental care supports identity, autonomy, and dignity. This aligns with research highlighting the active contribution of older adults to climate adaptation and community resilience (Zhang and Chen, 2024). Both questionnaire responses and focus group discussions indicate that caring for home, land, or neighbourhood is closely linked to feelings of purpose, autonomy, and dignity among older participants. Participants referred, for example, to maintaining a small garden or balcony, reducing household waste, taking care of shared spaces, or paying attention to everyday consumption as meaningful forms of environmental responsibility. Outdoor and nature-related activities were identified as important well-being practices by 86.3% of respondents in Italy and 90% in Lithuania, highlighting the close connection between environmental care, daily routines, and personal well-being.

Environmental care is often motivated by concern for future generations. Participants referred to everyday concerns about the quality of life their children and grandchildren will inherit, by highlighting worries about heat, access to green spaces, or the preservation of familiar environments. In several focus groups, concern for younger generations emerged as one of the strongest emotional motivations for adopting more sustainable habits and paying greater attention to environmental changes.

Older adults resist narratives that place excessive responsibility on individuals. In focus groups, participants expressed discomfort with messages that frame climate action as a personal moral burden, often stating that they already do what they realistically can within their physical, financial, and social limits.

For adult educators working with adults over 55, recognising existing practices of care strengthens agency and engagement.

Implications for adult education practice:

- Build on existing sustainable habits and values.

- Avoid moralising or idealising narratives.
- Frame sustainability as care and shared responsibility.

5. Overcoming Apathy, Fear, and Misinformation

Apathy and withdrawal often emerge from emotional overload rather than lack of interest.

Questionnaire results indicate that while concern about climate change is high, many participants feel overwhelmed by the volume and tone of climate-related information. In the questionnaires, concerns related to misinformation, digital overload, and excessive screen exposure were reported by 34% to 50% of respondents across partner countries. This overload contributes to fatigue and avoidance, particularly when information is perceived as alarming or conflicting. This phenomenon is consistent with research on eco-anxiety and climate-related emotional distress (Pihkala, 2020; Clayton et al., 2017).

In focus group discussions, participants described deliberately avoiding news or conversations about climate change during periods of personal stress or tiredness. *“Sometimes I stop following the news because it feels too heavy, and I don’t have the energy.”* (Focus group participant from Italy)

Fear and anxiety are closely linked to perceived lack of agency. In focus groups, participants described feeling discouraged when they could not see how their actions could realistically make a difference, often saying that climate change felt “too big” or “out of reach” for individual influence.

Information overload and misinformation intensify confusion and mistrust. Participants referred to conflicting messages, alarming headlines, or rapidly changing information as reasons for stepping back from climate-related content, describing avoidance as a way to protect themselves from constant worry. In Lithuania, 50% of respondents identified excessive screen time as a major digital challenge, while 34% expressed concerns about misinformation and unreliable online information.

These emotional responses were frequently described together with physical sensations such as tension, tiredness, or headaches, suggesting bodily stress reactions rather than lack of concern or interest.

For adult educators supporting adults over 55, safe and paced learning environments are essential for re-engagement.

Implications for adult education practice

- Create emotionally safe and trusting learning spaces.
- Pace information carefully and prioritise clarity.
- Support critical reflection without overwhelming participants.

6. Building Ecological Literacy Through Learning and Dialogue

Ecological literacy develops through dialogue and shared meaning rather than information transfer, reflecting principles of transformative adult learning (Mezirow, 2000). Both questionnaires and focus group discussions highlighted that participants engage more deeply with climate-related topics when learning spaces allow for exchange, reflection, and connection to personal experience, rather than one-directional delivery of technical information or abstract instruction. In the questionnaires, 56.9% of respondents in Italy and 70% in Lithuania identified in-person and group-based learning formats as the most effective ways to engage with health, sustainability, and well-being topics.

In several focus groups, participants described learning moments that felt meaningful not because of new facts, but because they could talk about how climate change affected their own daily lives. Conversations often started from concrete situations such as adjusting walking routines during heatwaves, changes in gardening practices, or decisions about heating and energy use at home, and gradually expanded into broader reflections on climate and sustainability. *“I understand more when we talk about what is happening in our lives, not when someone just explains things.”* (Focus group participant from Italy)

Dialogue supports both understanding and emotional processing. Qualitative data from focus groups showed that sharing personal stories and listening to others helped participants feel less isolated and more able to engage with complex or worrying topics. Learning emerged through group conversations, informal exchanges, and facilitated reflection moments, rather than through formal lectures or expert-led explanations. *“Hearing that others feel the same makes it less frightening.”* (Focus group participant from Greece). Peer support and shared learning

environments were repeatedly described as important motivational factors, particularly among participants over 55 who reported feeling more confident learning with others of a similar age.

From an ecosomatic perspective, learning is supported by safety and bodily regulation. In several focus groups, participants referred to very concrete conditions that helped them stay engaged, such as being allowed to sit comfortably, move or change position, remain silent when needed, or briefly step outside during intense discussions. Adult educators observed that when sessions allowed flexibility in posture, pace, and participation, participants were more willing to remain present and engage with difficult topics over time.

For adult educators working with older learners, ecological literacy is inseparable from relational processes. Adult educators supporting adults over 55 play a key role in creating learning environments where climate-related knowledge can be processed at a human pace and connected to lived experience.

Implications for adult education practice

- Use participatory and dialogic learning formats grounded in everyday situations.
- Encourage storytelling and peer exchange rather than expert-driven input.
- Allow time, pauses, and emotional processing during learning activities.
- Design learning environments that support emotional regulation.

7. Sustainable Lifestyles: Everyday Actions That Matter

Sustainable lifestyles are most meaningful when embedded in everyday routines, especially when actions remain compatible with existing capacities and social contexts (Zhang and Chen, 2024). Participants adapt existing habits rather than adopt idealised models. The specific forms of sustainable behaviour varied across local contexts, shaped by housing conditions, access to services, and community structures, yet the preference for manageable and familiar actions emerged consistently. In the questionnaires, a majority of respondents reported already practising simple sustainable behaviours such as recycling, reducing waste, walking more, or buying local products whenever possible.

In focus groups, participants frequently referred to small adjustments already integrated into daily life, such as reducing food waste, reusing materials, limiting unnecessary travel, or choosing local products when possible. These actions were described not as environmental activism, but as practical responses aligned with personal values and available energy. *“I don’t feel able to change everything, but I can take care of small things every day.”* (Focus group participant from Lithuania)

Small, embodied actions restore a sense of agency. Across questionnaires and focus group discussions, participants consistently reported feeling more capable and motivated when sustainable actions were manageable, familiar, and integrated into daily routines. Outdoor and nature-related activities were identified as important well-being practices by 86.3% of respondents in Italy and 90% in Lithuania, highlighting the strong connection between sustainable routines, bodily well-being, and everyday life.

From an ecosomatic perspective, sustainability supports regulation and continuity. Actions aligned with bodily rhythms reduce stress and support long-term engagement rather than short bursts of motivation.

Sustainability fatigue emerges when expectations exceed lived capacities. Participants described feeling discouraged when sustainability was framed as constant effort, sacrifice, or moral duty, particularly in moments of physical tiredness or emotional overload.

For adult educators working with adults over 55, focusing on achievable everyday actions strengthens confidence and participation.

Implications for adult education practice

- Highlight small, realistic actions already present in daily life.
- Avoid framing sustainability as sacrifice or moral obligation.
- Support continuity and coherence rather than performance.

8. Ecosomatic Practices for Climate Awareness

Climate awareness becomes sustainable when grounded in bodily experience, which can help regulate emotional responses such as eco-anxiety (Pihkala, 2020). Attention to sensation helps transform abstract concern into presence, making climate-related issues more manageable and less overwhelming.

In focus group discussions, participants described moments of bodily awareness as particularly helpful during periods of worry or overwhelm. Simple practices such as slowing down while walking, noticing breath, or sitting quietly outdoors were mentioned as ways to reconnect with the present moment and reduce anxiety. *“When I walk slowly and pay attention to my breathing, I feel more grounded and less anxious.”* (Focus group participant from Italy)

Ecosomatic practices support regulation, presence, and continuity. Participants referred to activities involving gentle movement, breathing, or contact with nature as supportive for emotional balance, especially when climate-related information felt heavy or distressing. Questionnaire responses also showed high interest in practical and experiential learning approaches connected to movement, relaxation, and everyday well-being.

Caring for the body supports caring for the environment. Participants described how feeling more regulated and present helped them reconnect with values of care, responsibility, and reciprocity, rather than urgency or pressure.

Ecosomatic practices lower the threshold for participation. Their accessibility allows engagement even when energy levels are low or physical limitations are present.

For adult educators working with adults over 55, integrating simple body-based practices supports sustained engagement.

Implications for adult education practice

- Integrate short, gentle body-based practices into learning activities.
- Use practices that can be adapted to different physical capacities.
- Prioritise presence and regulation over performance.

9. Collaborative Action: Strengthening Community Resilience

Collective action reduces isolation and emotional burden, particularly in contexts where ageing populations face climate-related vulnerabilities (Sadana et al., 2024; Zhang and Chen, 2024).

Shared engagement distributes responsibility. The forms of collective action differed across partner contexts, ranging from informal neighbourhood support to organised community initiatives, yet participants consistently described shared action as emotionally protective and sustaining. In the questionnaires, group-based and in-person learning formats were preferred by 56.9% of respondents in Italy and 70% in Lithuania, highlighting the importance of shared participation and social connection for engagement and well-being. *“When we do things together, it feels lighter. You don’t feel alone.”* (Focus group participant from Lithuania)

Community-based responses emerge from everyday relationships. Focus group discussions highlighted that informal collaboration, mutual help, and trust-based relationships play a central role in strengthening community resilience across different local contexts. Participants referred to simple collective actions such as organising shared walks, exchanging practical advice, or supporting neighbours during extreme weather events as meaningful ways of staying connected and active.

Shared action lowers the threshold for participation. Acting together reinforces belonging and continuity, especially for those who feel limited in their individual capacity.

Collective engagement protects against helplessness and withdrawal. When action is shared, individuals are less likely to feel overwhelmed or solely responsible, making participation more sustainable over time. Collaboration also supports regulation through connection, as shared presence and mutual support help reduce emotional strain.

Implications for adult education practice

- Design group-based and collaborative activities.
- Value informal community initiatives.
- Reduce individual pressure by sharing responsibility.

10. Reflection: From Awareness to Empowered Action

Awareness becomes transformative when grounded in body, meaning, and everyday life. Across questionnaires and focus groups, participants expressed concern about climate change but also emphasised the need for approaches that connect awareness to daily life and personal capacity.

Emotional responses to climate-related uncertainty signal the need for care rather than correction. Focus group discussions repeatedly showed that emotions such as anxiety, fear, or withdrawal are not barriers to engagement but indicators of the need for supportive, paced, and relational learning environments.

Sustainable climate-related action grows from continuity, care, and relational support. Participants described small, embodied, and shared actions as more sustainable than isolated or high-pressure initiatives, particularly when supported by social connection.

From an ecosomatic perspective, caring for the body supports caring for the environment. These findings suggest that attention to bodily experience is not separate from climate engagement but central to sustaining it over time.

For adult education, moving from awareness to action requires slowing down, not accelerating. Learning processes that respect limits, build trust, and support continuity are more likely to lead to meaningful and lasting engagement.

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Theme 3 – Digital Literacy, Inclusion, and Lifelong Learning

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1. Introduction: Digital Inclusion in the Context of Green Ageing

Across Europe, demographic change, consisting of both declining birth rates and an ageing population, places increasing pressure on the labour market, the economy, and the social security system (Tsekeris and Christofilopoulos, 2023). These dynamics can be observed in Italy,

Lithuania, and Greece, which all experience declining birth rates and increased life expectancy, reshaping social and economic structures. In these countries, adults aged 55 and over, make up an increasingly large share of the population. Ensuring that people are able to green age through a healthy, active, and sustainable lifestyle, should therefore not only be a matter of individual well-being, but a social priority. The research implemented in BEEPGA highlighted the need for a collective approach to support the autonomy, social participation and resilience of older people while contributing to more inclusive and sustainable societies for present and future generations.

In recent years, sustainability and digital transformation are increasingly understood as interrelated processes especially since sustainability-focused policies can advance digital innovation, and digitalisation can be highly beneficial for the environment (Tsekeris and Christofilopoulous, 2023). Consequently, understanding how to maintain a healthy green lifestyle while growing older means understanding green ageing and sustainable living in the context of digitalisation. Literature shows that potential barriers for older people to participate in this transition can include fear of the complex nature of many platforms used to access online resources, as well as privacy concerns related to personal information collected by others. Other health-related factors can also impact older adults' confidence in using digital technology. These challenges are well documented in broader digital inclusion research and align with the findings of our own survey (Holgersson et al., 2019; Tsatsou, 2022; Tomczyk et al., 2023; Mohan et al., 2024; Kuzlewska et al., 2025).

Our research confirms that across all participating countries, most older adults wish to continue to learn and grow as they age, and many express a desire to remain connected to the world around them and embrace the concept of green ageing. The vast majority (84.0%) of participants in Lithuania identified remaining independent and self-sufficient as the main concept associated with "healthy and sustainable ageing". Similar perspectives were expressed in the focus group. A participant of the focus group in Lithuania stated: *"Healthy ageing means staying strong enough to take care of myself, without asking others."* In Greece, 70% of the participants of the survey indicated that keeping social connections and participating in groups or organisations plays the most important role. In Italy, many participants associated healthy and sustainable ageing with maintaining physical well-being through everyday routines, outdoor activities, and connection with nature. Therefore, we will explore how digital literacy contributes to older

people's well-being, independence, and participation, and how tailored training can bridge the gap between digital transformation and sustainable, fulfilling green ageing.

2. The Importance of Digital Literacy for Well-being and Participation

Healthy and sustainable ageing is increasingly regarded as a multi-dimensional concept, which encompasses social involvement, independence, and in general the quality of life, as well as an individual's overall health. Results from our survey reveal that there are certain attributes that older adults typically associate with both the healthy and sustainable aspects of ageing. In Italy, survey participants connect maintaining a healthy lifestyle (74.5%), healthy eating, natural products and reducing waste (62.7%), and being independent and self-sufficient (60.8%) as the most important components for old people's well-being. The findings from the Lithuanian questionnaire paint a similar picture of remaining independent and self-sufficient (84.0%), maintaining a healthy lifestyle (72.0%), and eating healthily (54.0%). For respondents in Greece, the three top ranking attributes for older adults include, their ability to keep their social networks active and participate in groups, clubs or organisations (70.6%), next to the mentioned aspects.

It becomes clear that the capacity to use digital media confidently and make informed decisions can help people build and maintain their social networks and have access to healthcare information and resources. The use of digital platforms can help people stay in touch with close people, but also build new connections while growing older and find comfort in their own community. In a focus group in Greece, a member from the LGBTQ community, stated that digital inclusion can not only help older people to spread information and awareness in the field but also help them to feel a sense of belonging and family. Examples of this include providing access to cultural resources through online platforms and sustaining relationships with communication tools, especially for those who have mobility limitations. Digital literacy is therefore much more than just a skill to use technology. It's not only a matter of convenience but has also become an enabler for participation in society.

Due to the ongoing digitalisation of public services, communication, and daily actions, the ability to navigate the digital world is urgently needed for individuals to participate fully in the modern society. Digital inclusion can provide pathways to building community, accessing public

services, cultural resources and lifelong learning opportunities (Mohan et al., 2024). At the same time, digital exclusion can prevent older adults from receiving these benefits. Limited access to digital communication will only reinforce the marginalisation of people socially, economically, and politically (Holgerson et al., 2019; Tsatsou, 2022). For adult educators working with seniors, additional effort to eliminate barriers to acquire digital skills and create a welcoming and supportive environment for older adults, communities can support older adults, especially in developing the necessary skills to effectively utilise technology in support of a healthy, sustainable, and fulfilling life as they age.

Implications for adult education practice

- Offer simple and practical digital training adapted to older adults' needs.
- Digital skills help older adults stay connected and access services.

3. Common Barriers: Accessibility, Confidence, and Motivation

As Tomczyk et al. (2023) demonstrate, there are a number of different types of barriers (structural, cognitive, and socio-emotional) that can prevent older adults from accessing technology. The barriers that reduce access to technology for older adults include a lack of access to devices that meet older adults' needs, a lack of training opportunities for older adults, and technology interfaces that do not take into account age-related physical changes.

The responses in our questionnaire confirm this phenomenon as the most mentioned barrier, which approximately 50% of the participants in all countries cited, is the issue of having too much screen time. In the focus groups in Greece, many older people mentioned that they are afraid of missing out and feel that new technologies rather hinder social action than benefit them. A participant in the Italian focus group stated *“It’s not the app that bothers me but the person who uses it because, first of all, they’re missing their own moment of life”*. This quote can be seen as a mirror of the distanced and negative picture that older adults can have when thinking about digital devices and the use in everyday life. Research in Italy and Lithuania furthermore shows that the majority is equally affected by an overabundance of passwords and accounts. Misinformation and fake news, privacy concerns, the complexity of platforms, and the lack of adequate training or support are the barriers mentioned next. This not only includes training for

complex applications but can also simply mean accompanying older adults to the ATM and teach them how to use it, which was emphasized by a participant in a focus group in Greece: *“There are people who need help at the ATM, but they are anxious to ask for help and, moreover, they do not trust everyone to help them. That is why training will be very useful.”*

These barriers are consistent with wider European research emphasising the coexistence of skill-based, motivational, and structural obstacles (Tomczyk et al., 2023). Other important barriers, highlighted by our research include the fact that even though older people wish to learn, the lack of motivation is the top psychological barrier, cited by 68.0% of respondents across the countries. The general lack of time to put oneself into a learning position, the negative thinking and frustration of new technologies, the lack of motivation, financial constraints and fatigue after work were identified as the major factors demonstrating that accessible, low-cost, and non-fatiguing program design is essential to convert interest into consistent participation. This shows that it is important to recognise that digital inclusion is not only about increasing skills but also about ensuring that older adults feel comfortable and motivated to participate.

This implies that many older adults are afraid of the possibility of making mistakes, not meeting others’ expectations, and the need for constant internet access (42% in Lithuania; 31.4% in Italy, 25,5% in Greece). Concerns regarding their online safety and security, the rapid evolution of digital technology, and the need to feel comfortable using digital resources need to be addressed within the framework of digital inclusion. Practical support, effective communication, and building a trusting relationship with older adults can be key elements for adult educators working with seniors in creating opportunities for them to engage with technology that creates a sense of usefulness, safety, and empowerment.

Implications for adult education practice

- Design low-cost, simple training that fits into daily routines and avoids fatigue or overload.
- It is necessary to explain privacy clearly, reduce complexity, and create a supportive learning environment.

4. Overcoming Digital Anxiety and Building Confidence

Through the findings of research across Lithuania, Italy, and Greece, it became evident that many older adults struggle with some sort of digital anxiety as they navigate their journey in utilizing online services. When considering AI and e-banking, many of the participants approached these emerging technologies cautiously. During multiple of our focus groups, we found out that some participants did not even know about the concept of AI in general, which highlights the gap between older people and the rest of society, where AI is taking over. Although most participants appreciated the convenience associated with using these technologies, they were inhibited from using them independently out of fear of making an error or falling victim to fraud. A participant of the Lithuanian focus group admitted: *“Sometimes I am afraid to press the wrong button and delete everything”*. Another person stated that they use their phone daily, but still get lost as soon as apps change their symbols or interface. As such, this hesitation demonstrates not only the technical complexities associated with these tools but also the overall lack of trust users have in automated technologies that seem foreign or unmanageable.

Even though there seem to be a lot of barriers, older people still tend to find the concept of using online tools for their everyday life convenient. Findings from Lithuania, Italy, and Greece show that a significant proportion of older people already use digital tools like communication apps (e-mail, messenger platforms), online banking, and online medical booking tools (Lithuania: 84.0%, Italy: 47.1%, Greece: 80.4%). The findings show that while we should focus on older adults becoming more digitally confident, it is essential to appreciate that they are already trying to implement these tools in their lives. Therefore, adult educators need to create positive, non-threatening training opportunities for older adults, so they can safely practice, which is just as important as teaching. Providing a user-friendly interface, as well as tutorial-style, step-by-step support, along with developing collaborative environments, can help reduce anxiety and establish trust in the digital world.

Implications for adult education practice

- Build trust by explaining AI, e-banking, and online safety in simple, practical terms.

- Step-by-step guidance and user-friendly communication apps help build confidence and trust.

5. Learning Preferences of Older Adults: What Works Best

Our focus groups and research provided valuable information about how older adults prefer their trainers to help them learn digital skills as well as other practical knowledge. Older adults across Lithuania, Italy, and Greece indicated a strong preference for high-touch, human-centred methods of education, which incorporate interaction with other students and provide a tailored approach to their learning requirements. Residential group training with individual consultation was the number one choice of older adults in both Greece (72.5%) and Lithuania (70.0%), while participants in Italy (56.9%) showed a distinct preference for a workshop with coaching (the combination of an in-person workshop and coaching) and the combination of face-to-face and online learning (51.0%).

Participation in community-based training was linked to many of the same factors that underlie the desire to remain active. Free availability of regional training and a positive learning environment had a significant impact on motivation to participate in community-based education. In all countries, the focus groups showed that for everyone, the appropriate use of digital tools means choosing technology only when it serves to make activities more efficient. The training should therefore link and adjust digital skills development to solve the important needs of the target group.

Overall, the findings indicate that by providing personal interaction, practical relevance, and supportive environments that promote respect for time, energy, and past experiences, digital learning for older adults is most likely to succeed.

Implications for adult education practice

- Offer face-to-face, small-group training with individual support and coaching.
- Keep training practical and linked to everyday needs for the older people.
- Provide free, local courses in a friendly, respectful learning environment.

6. Inclusive Learning Environments: Online and In-person

Older adult learners expressed their desire to have a low-threshold learning environment where they feel welcome and comfortable. They wish to be able to access services at low or no cost, as financial barriers have been one of the reasons that keep older adults from participating. During our research, we found out that in-person training in a group with individual consultation is the most popular one across older people in all countries. We furthermore identified that most participants prefer group training formats due to the opportunity for social support in addition to the ability to learn from others going through similar situations. In the Lithuanian focus groups, the Third Age University was given as a good example of training already taking place (recycling, digital literacy, staying healthy and active). Having a group to learn within makes participants feel less isolated and enables them to collaborate on various problems together.

In Greece, hybrid learning (49%) and ongoing personal support, in person or remote, (49%) are the next preferred methods, indicating interest in flexible options. Therefore, good public transport routes must be provided for individuals to travel to the location and venues must be accessible.

With regards to the creation of an inclusive learning environment, whether physically, virtually, or a mix of both, it is essential to note that it involves a holistic approach that goes well beyond having good routes and transportation. While transportation plays an essential role in facilitating physical accessibility, it is only part of the broader needs and requirements for all aspects of inclusion. In a physically inclusive environment, it is essential to ensure accessible routes, appropriate room configuration, lighting, sound, and equipment all work together to provide an efficient and practical environment. In virtual and mixed environments, the situation and requirements include the availability of good internet, the workability of the systems and devices with accessibility tools, clear sound and vision, and equal participation opportunities for online participants.

In terms of pedagogy, adult educators need to create an inclusive environment with diverse means of accessing information and showing knowledge, consideration and implementation of Universal Design for Learning concepts (a proactive educational framework based on neuroscience that improves access and engagement for all students by creating flexible learning

environments), and psychological security and respectful dialogue. Findings from this research show that some people are also open to self-study online courses (Lithuania: 28%, Italy: 17,6% Greece: 37,3%), but overall, live training is still the most attractive, as it is the most familiar format.

Implications for adult education practice

- Keep courses free or very affordable and create a warm, welcoming group atmosphere with personal support.
- Make it easy to attend: accessible locations, good transport, and reliable tech for hybrid options.
- Create a respectful space where everyone feels comfortable asking questions and learning at their own pace.

7. The Role of Adult Educators, Social Workers, and Peer Mentors

Our research findings indicate that support for older adults in their pursuit of digital inclusion through green ageing is most effective when delivered through a multi-actor approach involving adult educators, social workers, and peer mentors.

As for *adult educators*, they do much more than simply teach technical skills as they provide motivating support and create environments where their learners feel trusted and empowered to learn at their own pace (Mohan et al., 2024). Educators who work with older adults must possess patience, understanding, and empathy to meet the unique challenges faced by these individuals. In many cases, they need to adapt their approach to meet their needs. For example, to introduce complex technology to older adults by showing them how to apply digital skills to tasks that are relevant to them in their everyday lives.

Social workers can identify older adults in danger of digital exclusion risks by connecting them to the resources they need to build digital skills. Social workers can also take a more holistic view of older adults' needs by considering both the digital skills they require and their social and emotional needs. As a result, social workers can play a central role in supporting older adults to address issues such as social isolation and low self-confidence that might present obstacles to digital inclusion.

Furthermore, the involvement of *peer mentors* brings numerous advantages. They are able to relate personally to the problems faced by learners and give encouragement to others from their own experiences. By allowing for peer-to-peer interaction, peer mentors create a community atmosphere, which alleviates stress and anxiety and makes the transition to digital tools much less discouraging.

All these functions create a holistic support network that enables older adults not only to use technology successfully but also to engage actively in ecological and social initiatives that enhance both sustainable lifestyles and healthy living.

Implications for adult education practice

- Combine support from educators, social workers and peer mentors to create a strong support system.
- Focus not only on technical skills, but also on confidence, motivation and emotional support.
- Encourage peer learning, so older adults can share experiences and feel less alone in the process.

8. Using Digital Tools for Health, Environment, and Connection

Through the use of digital tools, older adults can take advantage of their opportunities to enhance their overall health, take action against environmental challenges, and maintain social connections. In Greece, Lithuania, and Italy, most older adults use digital tools for two general purposes: maintaining communication with friends and family, and accessing essential services, which indicates that digital technologies help maintain a social connection and also allow older adults to remain independent in managing their daily routines.

Messaging and social media applications are the most popular digital tools in Greece (80.4%), while email is the next most used at 76.5%. The next highest percentage of users is for banking and finance apps (64.7%). A very similar but more developed use of digital tools exists in Lithuania. Across the country, email is nearly universally used by older adults (96.0%), while messaging or social network apps are used by 92.0% of older adults. Lithuanian older adults also have a high rate of use of online registration for doctor's appointments at 84.0% and banking

apps at 68.0%. Similarly, in Italy, digital engagement is primarily through email (88.2%) and messaging or social media tools (84.3%), but the next most popular applications used by older adults are financial (70.6%) and online appointment bookings for physicians (47.1%).

Although most of the digital tools are already promoting connectivity and practical independence, there is a significant underuse of the many benefits that can be derived from digital technologies for healthy, sustainable ageing, such as health monitoring technologies, lifestyle, and well-being apps, as well as assistive technologies. Therefore, although there are already many ways in which older adults are using digital tools to connect and be independent in their daily lives, there remains a substantial amount of unused potential to utilise digital technologies in a manner that promotes a healthy, sustainable, and long-term well-being.

Implications for adult education practice

- Build on the tools older adults already use (email, messaging, banking) and gradually introduce health and well-being apps.
- Show practical benefits, such as online doctor bookings, health monitoring or lifestyle apps, to support independence.
- Encourage simple digital habits that support both social connection and long-term health.

9. Designing Tailored Training for Digital Empowerment

As the previous chapters show, to properly train older adults in digital literacy, it is essential to create training programs that consider their individual needs and preferences and provide flexibility. Providing practical and applicable training content while acknowledging the participants' interests in healthy ageing and sustainability will result in a successful training experience.

To create personalised training, the adult educator needs to understand each participant's background, skill level, and personal goals. The goal of personalising the training is to ensure that it has practical applications, such as using online forms to access government services, e-health portals, or using apps that help to promote sustainable living. To support building confidence and minimize frustration, the pace of training needs to be slow, the language should

be clear, and participants should have plenty of hands-on practice opportunities. Using a group-based format works well for older adults, as it allows opportunities for peer support and socialization.

Combining the subject matter of digital learning with green ageing topics, such as energy saving and healthy eating, will increase the relevance of the training and provide a greater level of engagement. In the same way, community-based workshops where digital, health, and environmental learning are integrated into familiar activities (e.g., knitting clubs that also share sustainability tips, choir groups that learn breathing and body awareness) can furthermore strengthen the feeling of being socially connected while growing older. Removing any practical barriers to participating in training and providing participants with the necessary equipment and internet access will support participant engagement. Providing follow-up support and refresher sessions will enable older adults to maintain their skills and assist them in meeting any new challenges as technology continues to evolve.

Incorporating intergenerational mentors allows participants to learn about technology from someone who has lived experience with it. However, this can only happen if younger people bring a lot of patience to the training and do not judge older participants for any questions. The overall opinion on new technologies and their ongoing development can be seen as an indicator of older people's view on the younger generation in general, and digital frustration can represent general frustration towards young people. In the Italian focus groups, a participant said “young people today can't do anything without technology,” or “your kids help you, but they get annoyed.” While this generational conflict is not a new social phenomenon, and older people also play a part in it, there is a strong need for the younger generation to actively consider these dynamics and carefully listen to the older generation and their doubts to provide meaningful support.

Implications for adult education practice

- Training should be personalized, practical, and slow-paced, with hands-on practice and clear language.

- Group and community-based formats help with peer support, social connection, and integrating topics such as healthy ageing and sustainability.
- Intergenerational mentoring works best when younger people are patient and non-judgmental.

10. Reflection: Digital Transformation as a Bridge to Participation and Sustainability

Digital transformation presents significant opportunities to connect older adults with social participation and sustainability. By creating an environment where digital tools are accessible, meaningful, and supported by a positive learning environment, older adults will have access to opportunities for lifelong learning, active civic engagement, and environmental activism. Digital inclusion for older adults goes beyond just having access to a computer or smartphone. It provides older adults with independence, health improvements, social connections, and opportunities to contribute to their communities. When older adults participate digitally, they can contribute to green initiatives by reducing their own carbon footprint, as well as getting involved in local sustainability efforts. This connection between digital empowerment and green ageing creates a vision of ageing that is active, connected, and environmentally conscious.

The transformation of older adults into digitally empowered citizens requires thoughtful management. If digital tools are not designed inclusively, up participants do not receive adequate education, or if their individual choices are not respected, digital innovations may widen the current gap between older adults and those who have access to digital technologies. Therefore, it is imperative that older adults do not get left behind or feel pressured to use a technology they do not understand or trust. Digital transformation as a vehicle for participation and sustainability should inspire cooperation among educators, policymakers, social workers, and communities to develop ways in which older adults can access and thrive in the digital world, while offering their unique expertise, values, and efforts toward achieving sustainability.

Implications for adult education practice

- Make digital tools simple, accessible and supportive, so older adults feel confident using them.

- Connect digital learning to meaningful goals such as community participation and sustainable living.

Therefore, our concrete recommendations are the following:

- Increase confidence in digital systems by addressing well-being, misinformation, privacy, and confidence-building.
- Build trust and confidence through high-engagement and co-learning (e.g., live training modules in addition to individual support).
- Differentiate while staying inclusive, with tailored approaches for adults 55+ and educators around common goals of both groups.
- Focus on practical, high-friction issues like password management, data security, and fear of mistakes.
- Prioritise human-centred formats, including in-person and blended learning, to create more opportunities to engage with digital systems for all, allowing people to learn at their own pace.
- Reduce participation barriers through affordability, accessibility, and flexible, modular design.
- Establish and strengthen motivation and belonging via peer support, supportive environments, and clear practical benefits.

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SUMMARY

This guidebook has been developed as part of the BEEPGA project to respond to the interconnected challenges of ageing, environmental change, and digital transformation. By bringing together insights from focus groups, survey data, and academic research, it offers an evidence-informed and practice-oriented framework for supporting green and healthy ageing across diverse contexts.

The findings clearly show that older adults are not passive recipients of care, but active agents of well-being, learning, and change. Across partner countries, participants consistently expressed a strong desire to remain independent, maintain meaningful social connections, and live in balance with their environment. At the same time, they face structural barriers—including health limitations, time constraints, financial challenges, and digital inequalities—that must be addressed through inclusive and adaptive approaches.

In response, the guidebook has proposed a holistic model built around three core dimensions:

- the integration of body, mind, and environment through ecosomatic and nature-based practices,
- the promotion of digital inclusion and well-being as a foundation for participation and autonomy,
- and the strengthening of learning, community engagement, and intergenerational exchange as drivers of resilience and social cohesion.

Together, these dimensions highlight that green ageing is not a single practice, but a continuous, relational, and context-dependent process. It emerges through everyday actions, supportive environments, and opportunities for meaningful participation.

Importantly, the guidebook moves beyond theory by offering concrete, adaptable recommendations for educators, organisations, and communities. The practical tools, checklists, and examples are intended to support implementation while allowing flexibility to respond to local needs, cultural contexts, and individual capacities.

Looking forward, the impact of this work depends on how these ideas are applied, adapted, and sustained in practice. Organisations and practitioners are encouraged to:

- embed green and healthy ageing principles into existing programmes,
- create inclusive learning environments that reduce barriers to participation,
- and continue engaging older adults as co-creators of knowledge and community life.

By doing so, the guidebook contributes not only to improving individual well-being, but also to building more inclusive, sustainable, and resilient societies in line with European values and priorities.

Green and healthy ageing invites a shift in perspective: from seeing ageing as decline, to recognising it as a stage of potential, connection, and contribution. When individuals are supported to care for their bodies, engage with others, and reconnect with the natural environment, they do not only age well—they actively participate in shaping a more balanced and sustainable future for all.

POLICY-ORIENTED PERSPECTIVE

The findings of the BEEPGA project highlight the need for integrated policy approaches that connect healthy ageing, environmental sustainability, and digital inclusion. Policymakers at local, national, and European levels are encouraged to invest in age-friendly and green community infrastructures, ensure accessible and affordable lifelong learning opportunities, and support digital inclusion initiatives tailored to older adults. Policies should prioritise preventive, community-based well-being strategies, including nature-based and ecosomatic practices, while addressing structural barriers such as mobility, affordability, and access to safe public spaces. By embedding these principles into social, health, environmental, and educational policies, decision-makers can foster inclusive, resilient, and sustainable societies that enable older adults to remain active, connected, and empowered.