## Planetary Health by Healing Forests as Nature Based Solution -PHorestAll

The PHorestAll project, part of the broader initiative "Nature-Based Solutions for Biodiversity, Human Well-being, and Transformative Change" (BiodivNBS), represents a pioneering effort to merge environmental conservation with public health through the concept of "Healing Forests." This initiative explores how natural forest environments can be harnessed as therapeutic landscapes that not only foster human well-being but also promote biodiversity conservation. At the heart of PHorestAll lies the hypothesis that interaction with forests can have profound health benefits. The project sets out to scientifically substantiate this claim and establish forests as viable nature-based solutions for enhancing health. It aims to develop and validate a framework where forests are not merely seen as habitats to be conserved, but as active contributors to human health and well-being. PHorestAll's research spans five countries-Portugal, Slovenia, Poland, Lithuania, and Taiwan-each selected for its unique forest ecosystems ranging from alpine to subtropical. The project's methodology involves a thorough analysis and designation of specific forest areas that could potentially be certified as "Healing Forests." These areas are chosen based on their ecological health, biodiversity, and capacity to enhance human health. The scientific investigation focuses on the intricate relationships between the soil microbiome, biogenic volatile organic compounds (BVOCs), and their impact on both the environment and human health. By analyzing these components, the project seeks to draw direct connections between forest air quality and therapeutic benefits. The goal is to provide a robust scientific basis for the therapeutic use of forests, incorporating the analysis of air and soil samples to determine how these elements contribute to physical and mental well-being. Integral to PHorestAll is its commitment to stakeholder engagement and citizen science. The project utilizes the JoinUs4Health platform (main outcome of one of the Horizon 2020 projects realized) to foster innovative policy development and encourage public participation in research. By involving citizens in the scientific process—through workshops, information sessions, and hands-on research activities—PHorestAll democratizes science and ensures that its findings resonate more broadly with the public. Furthermore, PHorestAll aims to influence policy by integrating its research findings into public health and forest management strategies. The project advocates for the systematic inclusion of forest therapy in national health services and the development of policies that recognize the health benefits of biodiverse, well-managed forests. This policy impact is expected to extend beyond immediate health benefits by promoting sustainable forest management and biodiversity conservation as integral elements of public health infrastructure. In conclusion, the PHorestAll project is more than a research initiative; it is a transformative movement towards recognizing and utilizing forests as vital resources for public health and planetary well-being. By bridging the gap between environmental science and health care, PHorestAll not only aims to advocate for the therapeutic use of forests but also to establish a new paradigm in how we perceive and interact with our natural environment. Through this innovative approach, PHorestAll seeks to inspire a global shift towards more sustainable and health-oriented environmental policies.