Relevant Policy Guidelines

Policy Guidelines	Description
Forestami	Forestami is a strategic vision at the Milan Metropolitan Area towards a great Metropolitan Park; with the aim of collecting, implementing, and enhancing the main green, permeable and tree lined systems.
Piano Aria Clima	Piano Aria Clima of the Municipality of Milan (2022) aims at reducing air pollution and responding to the climate emergency through sustainable urban/ mobility/ energy production planning.
Progetto CLIMAMI	ClimaMi focuses on urban land design, planning and management and it is aimed to make the issue of climate change adaptation in the city of Milan consistent with current guidelines, policies and regulations.
PUMS	SUMP of the Municipality of Milan (2018) contains strategies and guidelines on the future of the city's mobility. It is based on participatory approach, sustainability, measurable targets, and costs/ benefits assessment.

Relevant Data Portals

Data Portals	Description
AIR PORTAL	The ESA Air-Portal research project shows models air quality in urban environments using a combined processing of geo-information, sensors, satellite data, road information and forecasting models.
ARPA	ARPA Lombardia calculates the Air Quality Index both in relation to readings from an individual monitoring station and from model-estimated concentrations, according to the European Environment Agency.
CITTADINI PER L'ARIA	Cittadini per l'aria is a non-profit association of citizens involved in air quality research initiatives. One the analyses proposed by them shows the diffusion of NO_2 on the territory of Milan (see Figure 2).
Copernicus	Copernicus (European Union's Earth observation programme) provides predictions of daily mean and maximum concentrations of pollutants (e.g., O_3, CO, NO_2, SO_2, PM10, PM2.5, etc.), computed with the Ensemble model.
Copernicus sentinel	Copernicus Sentinel 2 (EU-owned satellites) provides data about Canopy Height Model with ground sample distance of 10 m using LiDAR measurements and the pixel-based canopy height estimation model.
EcoVision	EcoVision Lab of the ETH Zürich provides data about global canopy top height for the year 2020 at 10 m ground sampling distance through a probabilistic deep learning model and Sentinel-2 images.
GLOBAL FOREST WATCH	Global Forest Watch is an open-source web application to monitor global forests in near real-time, with data from the NASA's MODIS sensor, Google/UMD, Imazon, Terra-i, and NASA.
i-Tree	i-Tree Eco is a software designed to use data collected in the field from single trees and complete inventories, along with air pollution and meteorological data, to quantify environmental effects and value to communities.
LUiSA	JRC LUISA Territorial Modelling Platform is used for the ex-ante evaluation of EC policies that have a territorial impact. It is based on the concept of 'land function' for cross-sector integration.
NASA	NASA Global Urban Heat Island provides data and instructional tools centred on the topic of Urban Heat Islands, such as interactive models, story maps, and other resources.
TOMTOM	TomTom estimates the emissions and energy consumption due to vehicle traffic for cities, by combining and modelling several data about traffic, land (slopes, road classes), vehicle fleet, emission and consumption.
Treepedia	Treepedia research project measures the canopy cover in cities. It is based on a scalable and universally applicable method by analyzing the amount of green perceived while walking down the street.
TROPOMI	TROPOspheric Monitoring Instrument is the satellite instrument on board the Copernicus Sentinel-5 Precursor satellite. TROPOMI Explorer is application to visualize air pollutant time series data.

Relevant Research Projects

Research Projects	Description
CLEVER Cities	The H2020 CLEVER Cities project aims to increase local knowledge of nature-based solutions, to demonstrate that greener cities work better for people and communities, and to contribute data and information to EU policy-making.
LIM	LIM landscape information modelling® is a landscape approach to Building Information Modeling (BIM) which supports the design of Nature-based Solutions and steers informed decisions for greener and healthier cities based on a data-driven approach.
THRIVE ZONES	The Thrive Zones project suggests actionable urban design solutions and reduce exposure to poor air quality and increase access to better air quality at the neighbourhood and street scales.
UNaLab	The H2020 Urban Nature Labs research project develops nature-based solutions to enhance the climate and water resilience of cities, via co-creation with stakeholders and implementation of 'living lab' demonstration areas.
VARCITIES	The H2020 VARCITIES research project is aimed at implementing nature-based actions in cities and at establishing sustainable models for increasing the health and well-being of citizens exposed to different climatic conditions and challenges.
Veg Gap	The LIFE VEG-GAP research project is focused on developing a strategy for providing new reliable information in support of designing urban Air Quality Plans, considering the urban vegetation ecosystems characteristics.

Nature-based Solutions to Mitigate Vehicular Traffic Pollution Beyond SUMPs

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