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Research article

The role of the committee of the regions (CoR) to implement the Green Deal at the local level: an overview of Italy

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Abstract: The contribution focuses on the role of cities in the implementation of the so-called Green Deal, the ambitious program proposed by the European Commission, in accordance with the objectives set by the Paris Agreements, to implement the use of clean energy resources, favour the circular economy, restore biodiversity and reduce pollution. The Plan, which for the seven-year period 2021–2027 has a budget of economic resources of 100 billion Euro, aims to involve in transcalar perspective all territorial and administrative levels of the Member States and thus contribute to the achievement, in 2050, of climate neutrality. The main objective of the work is then to concentrate, with descriptive intent, on the policies that, in Italy, are being activated at local level in coherence with the European perspectives. In particular, reference will be made to the initiatives proposed and sponsored in Italy by the Committee of the Regions of which a critical overview is proposed. A further reflection will be dedicated to how digital innovation is called to support the macro-policies of energy transition in the EU.

Keywords: city; environment; digital transition

1. Introduction

This paper intends to focus on cities by considering them the hubs where environmental best practices and the use of ICT apply most. In particular, in the European context, cities are the most dynamic design spaces for setting energy and technological transition policies. Even in the obvious, it is impossible to think of the city apart from Calvino [1]. *Invisible Cities* are

the game of mirrors that best reflects and constitutes the literary discourse on cities[1]. Cecilia, the city that devours the surrounding rural space becoming an endless labyrinth [7,8], allows the thought to run towards Kevin Lynch [9] who, as early as 1965, on the interconnections between the city, environment and prospects of life had prophetically ruled:

For perhaps the first time in history we have the means of producing an enjoyable environment for everyone. It need not be saved for vacations but can be achieved in the world into which we wake every day. At the same moment we are becoming highly aware of the ugliness and discomfort the urban colossus now imposes on most of its inhabitants. Means and conscience should go together. Vast, drab and Chaotic, the colossus looks permanent but is in fact changing rapidly. Its enormity, its complexity and changefulness, the diversity of function and life style, our scale of control in relation to the whole-all cause us to doubt our ability to manage the quality of our surroundings. Strategic action at the metropolitan scale is desperately needed.

Crutzen and Stoermer [10], in 2000, conceptualize the Anthropocene and better detect the horizon of the debate: spaces and communities are read together within the dynamics of production-consumption and their effects on the global ecosystem [11]. And these dynamics can be read in their radical and conflict dimension, as in Latour [12], "That is, a war of all against all, in which the protagonists may now be not only wolf and sheep, but also tuna fish as well as CO_2, sea levels, plant nodules or algae, in addition to the many different factions of fighting humans" or in the perspective of relationship, (ir) responsibility and limit [13].

In this context, it is the cities that represent the spatiality on which the reflection on sustainability, declined between quality of life and initiatives of ecological policy, has more thickened. The conceptualization of the megalopolis by Jean Gottmann [14] and the reflections on the global postmetropolis by Edward Soja [15] represent then, in the diversity of the analyses, two pivotal points of the geographical reflection on the evolutionary dynamics of the contemporary city.

With regard to the tradition of studies on the relationship between urban spaces and quality of life, I like to recall the reflections of Costantino Caldo [16], proposed in the proceedings of a conference on the theme:

In the complex structures of the most advanced societies, it is consumption that seems to take over the quality of life and be its determining factor.... The situation created in the most typical spaces of the consumer society, that is the dense urbanized areas, indicates the presence of new rarities of goods: the unpolluted air, the green, the water, the silence become rare, In essence, space and time are also discriminating factors.

[1] Almost entirely missing, in the theoretical notes reconstructed in the paragraph, is the reference to the endless debate proposed by architects and urban planners on the relationship environment-city and the role assumed by the project mediation of the plan for the understanding and management of the processes of relationship and transformation of communities and spaces [2–5]. It's a huge gap in this job. However, we want to report a brief reflection by Walter Gropius [6] that seems very significant to mention to give an idea of the neglected context: "It depends more on us architects today than ever before, to help our contemporaries to lead a natural and harmonious life.... Authentic architecture should be the projection of life itself, and this implies an intimate knowledge of biological, social, technical and artistic problems [in italics in the text]. …Our highest goal must, however, be to form men capable of tending to the totality".

If at that time the debate was already fully mature, on the basis of a reflection already begun in the Seventies [17–19], it was in the late eighties that international governance began, with the Brundtland report of 1987, to take the first concrete steps of policy making [20]. It is on research and environmental policies that, together with the development of a geoethical perspective [21] that empowers communities and individuals, in fact the game of contemporaneity is played. A contemporaneity that articulates its relationship with ecosystems and resources through urban fact and population growth. Caption in this sense the notation of Christopher Boone and Ali Modarres [22]: While sustainability is now more and more widely seen as a solution to population issues, the twenty-first century, the age of global urbanization, may become a decisive moment in human history and how we handle global consumption patterns. Connecting the dots between urban and environmental concerns may become less a theoretical and moral debate and more an issue of human survival.

Ash Amin and Nigel Thrift [23], in their 2017 *Seeing like a City*, gave a recent in-depth reflection on the double-edged link between the urban dimension and the dynamics of the Anthropocene; after proposing the evocative and dystopian image of the alien from the distant future that can easily distinguish the remains of cement, steel, cables and radioactive waste, symbol of the Anthropocene, about the critical city-energy consumption underlying the climate issue report:

Our global civilization is powered by around Thirteen terawatts of man-made energy Arising mainly from the unprecedented levels of energy consumption associated with cities. The point is that human beings already act as an energy source that begins to compare with plate tectonics in its Magnitude and force.

2. Method and goals

The present essay, called for mention one of the possible contexts of debate, on the role of cities in the implementation of the so-called Green Deal[2], the ambitious program proposed by the European Commission, in accordance with the objectives set by the Paris Agreements, to implement the use of clean energy resources, favour the circular economy, restore biodiversity and reduce pollution. The Plan, which for the seven-year period 2021–2027 has a budget of economic resources of 100 billion Euro, aims to involve in transcalar perspective all territorial and administrative levels of the Member States and thus contribute to the achievement, in 2050, of climate neutrality. The main objective of the work is then to concentrate, with descriptive intent, on the policies that, in Italy, are being activated at local level in coherence with the European perspectives. In particular, reference will be made to the initiatives proposed and sponsored in Italy by the Committee of the Regions of which a critical overview is proposed. A further reflection will be dedicated to how digital innovation is called to support the macro-policies of energy transition in the EU. The paper therefore focuses on the role that the Committee of the Regions is playing in fostering the local implementation of European environmental and technological policies. We have not found any particular bibliographic evidence on this aspect which instead seems crucial to us; the Committee represents a form of governance called upon to interpret the EU's transcalar policies. From a methodological point of view, the article proposes an analysis of the environmental and

[2] Look https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en, last accessed on September 2021.

technological projects of cities, contextualizing it in local and international political planning. In this sense, reading and referring to official documents were crucial tools.

3. Discussion

3.1. Green deal going local

The Committee of the Regions [3] is the consultative body which, within the institutional architecture of the EU, best represents the local administrations of the 27 Member States. Its function is to contribute, *motu proprio* or at the request of the central institutions (Commission, Council and Parliament)[4], to the legislative process concerning rules with a clear impact on local policies, especially in the fields of health, employment, education, economic cohesion, social policy, transport, energy and climate change. On ecological policies, it moves in synergy with the Covenant of Mayors, born in 2008 with the aim of leading climate change starting from urban contexts. Under the aegis of the Mayor of Seville, Mr Juan Espadas, a working group dedicated to *fine tuning* has been set up within the CoR within general planning and local initiatives. This group, *Green Deal Going Local*[5], which was attended by representatives from 13 Member States, was then set up to act on three aspects of the ecological transition plan. We quote from the institutional site: 1) To provide a crosscutting view on the numerous policy areas within the European Green Deal and ensure policy coherence and consistency across files and related opinions; 2) To reinforce the institutional outreach of the European Committee of the Regions on the Green Deal as to place cities and regions at the core of the path towards climate-neutrality; 3) To channel the challenges that local and regional authorities are facing while implementing the green transition locally and communicate their achievements and best practices as to facilitate its replication across the European Union.

On this basis, the group's efforts have been successful in more than 220 good practices of project actions by the most varied size and nature that have seen in order: Italy (39), Spain (37), Finland (21) and Sweden (21) most involved. Italy, with Manuela Bora, Councillor of the Marche Region[6] and both a member of the CoR and the Covenant of Mayors, of which she is in fact ambassador, returns an articulated mapping of projects and initiatives that macroscopically highlights a rift between the North and the South of the country. If south of Rome, the only testimony is represented by the Sicilian Municipality, of Balestrate on the Tyrrhenian coast, Emilia Romagna, Piedmont and Lombardy have been distinguished with a total of 25 initiatives. To provide a synoptic representation of the project effort and implementation of sustainable policies of Italian regions and cities in the framework of the Green Deal, please see the following table.

[3] Look at https://europa.eu/european-union/about-eu/institutions-bodies/european-committee-regions_it, last accessed on September 2021.

[4] Look at. https://www.eumayors.eu/about/covenant-initiative/origins-and-development.html, last accessed on September 2021.

[5] Look at https://cor.europa.eu/it/engage/Pages/green-deal.aspx, last accessed on September 2021.

[6] Look at https://www.regione.marche.it/Entra-in-Regione/Istituzione/Assessorato?AssID=16, last accessed on September 2021.

Table 1. The initiatives of the working group *Green Deal Going Local* in Italy.

City	Region	Activity
	Abruzzo	Energy efficiency in public buildings of the Abruzzo Region
Bologna	Emilia Romagna	Bologna Carbon Market (Bocam)
Bologna	Emilia Romagna	Sustainable events in Bologna
Bologna	Emilia Romagna	Microclimate in Bologna: from adaptation plan to master plan
Bologna	Emilia Romagna	Cultural heritage as a driver for participatory and sustainable urban regeneration
Bologna	Emilia Romagna	GAIA: urban forestation agreement in Bologna
Bologna	Emilia Romagna	SALUS SPACE (sustainable, accessible, liveable, usable social space)
Bologna	Emilia Romagna	Battirame—ecological-cycle-horticultural corridor
Bologna	Emilia Romagna	Emergency plans for urban mobility
Bologna	Emilia Romagna	Second Life: municipal reuse area
Bologna	Emilia Romagna	Energy and Environment Showroom
	Emilia Romagna	Regional Pact for jobs and the climate
	Emilia Romagna	Climate change mitigation and adaptation strategy for the Emilia-Romagna Region
	Friuli Venezia Giulia	NOEMIX—New Mobility in Friuli Venezia Giulia
	Friuli Venezia Giulia	IO SONO FRIULI VENEZIA GIULIA: a collective trademark promoting sustainability and traceability in the agri-food sector
Rome	Lazio	From Sustainable Urban Mobility Plan (SUMP) to lockdown and after: Will the city survive?
Capizzone	Lombardy	Transforming an abandoned building into a library and socio-cultural space
Cerete	Lombardy	Act locally and think globally!
Milan	Lombardy	The Italian road to energy communities
Milan	Lombardy	Resilient regions: service providing support for collaborative design geared towards change adaptation
Milan	Lombardy	Deciwatt system: Milan's digital window for the energy transition to a green public administration
	Brands	FEM—Energy and Mobility Fund (Energy and Mobility Fund)
Locana	Piedmont	Replacement of public lighting by energy-saving lighting fixtures
Mornese	Piedmont	Energy efficiency of Mornese's school building
Novara	Piedmont	Single contract for heat management
Novara	Piedmont	Free-floating electric scooter sharing service
Novara	Piedmont	Urban forestation: Strada Prelle
Novara	Piedmont	Afforestation: The Stone
Novara	Piedmont	Non-recoverable waste collection accompanied by precise data collection
Novara	Piedmont	Environmental sustainability plan

Continued on next page

City	Region	Activity
Balestrate	Sicily	Green Balestrate
	Tuscany	Integrated projects to reduce greenhouse gas emissions in urban areas
	Tuscany	ERDF Regional Operational Programme (ROP) 2014–2020 for energy efficiency projects in public buildings and business premises
	Tuscany	Toscana Carbon Neutral regional strategy
	Tuscany	Plastic in the sea
Bolzano	Trentino Alto Adige	Lifealps project
	Valle d'Aosta	GRETA-Near-surface Geothermal Resources in the Territory of the Alpine Space
	Veneto	CIRCE2020 (Expansion of the Circular Economy concept in the Central Europe local productive Districts)
	Veneto	Biomass A + "From branches to algae, towards a new wood-energy supply chain"

Note: Source: https://cor.europa.eu/it/regions/Pages/eir-map.aspx?view=stories&type=greendeal, last accessed on September 2021.

3.2. The most active cities: Bologna and Novara

The information gathered shows, at this stage, the great activism that some urban centers have registered. Among them certainly Bologna and Novara stand out and propose overall the sixteen projects identified in the table. Here we will simply give an account of the environmental governance initiatives that we consider most significant, as policy frameworks for more detailed actions.

The *Environmental Sustainability Plan*, reads on the portal of the CoR, represents an action, in fieri, of political-administrative simplification aimed at unifying, in a single framework document, the entire environmental planning of the city of Novara[7]. The will to proceed in this sense clearly emerges from the reading of the premises of the City Council Resolution n.46 of 16/02/2021 of the City of Novara; it proposes the establishment of the *Novarese Plan of sustainable logistics* (pivot, together with the drafting of the *Sustainable Mobility Plan*, of the environmental policies of the city); the deliberation considers as an integral and constitutive premise the fact that

in the *Single Programming Document (DUP)*, approved with the resolution of the City Council n. 70 of 16/11/2020, among the projects planned with reference to the Strategic Line "Environment and mobility rights of all" also includes the one that has as its object the adoption of a specific Environmental Sustainability Plan, a targeted planning tool that, starting from an examination of the

[7] Look at http://albopretorio.comune.novara.it/web/trasparenza/papca-ap?p_p_id=jcitygovalbopubblicazioni_WAR_jcitygovalbiportlet&p_p_lifecycle=2&p_p_state=normal&p_p_mode=view&p_p_resource_id=downloadAllegato&p_p_cacheability=cacheLevelPage&p_p_col_id=column-1&p_p_col_count=1&_jcitygovalbopubblicazioni_WAR_jcitygovalbiportlet_downloadSigned=false&_jcitygovalbopubblicazioni_WAR_jcitygovalbiportlet_id=160040&_jcitygovalbopubblicazioni_WAR_jcitygovalbiportlet_action=mostraDettaglio&_jcitygovalbopubblicazioni_WAR_jcitygovalbiportlet_fromAction=recuperaDettaglio, last accessed on September 2021.

environmental vulnerabilities evidenced on the city territory, is aimed at the prevention and correction of environmental impacts, with the identification of objectives and actions that the Municipality undertakes to put in place over the period of reference, with particular regard to the quality of environmental resources (air, water, soil), the production and collection of waste, the prevention of pollution, the regeneration and upgrading of degraded areas, the development of the local ecological network, the enhancement of city parks.

If therefore Novara proceeds in the effort to equip itself with programmatic and extensive tools for the planning of sustainable development and policies aimed at improving the quality of life in the urban context, Bologna also, in the congeries of best practices of detail, is confident about the planned endeavor. Since 2009, Bologna[8] has been engaged, within the LIFE+ programme and with a largely participatory process, in the BLUE AP project (*Bologna Local Urban Environment Adaptation Plan for a Resilient City*) and, in 2015 adopted the *Climate Change Adaptation Plan*, in the last few years it has adopted the *Sustainable Energy and Climate Action Plan* to plan and monitor the policies of urban eco-sustainability and green development [24]. This plan will eventually be incorporated into the *Sustainable Energy and Climate Action Plan*. In detail, the actions covered fall within the scope of three strategic areas that identify, for each policy, objectives, timing and resources. The following are all the actions: 1) Drought and water scarcity: a) To reduce natural water resources withdrawals; b) To eliminate parasitic water and the mixture of white and black water; c) To regulate the flow of the river Rhine; d) To protect local agricultural production. 2) Heat waves in the urban area: a) To protect and enhance extensive green wooded areas; b) To increase of green surfaces and trees within the structured territory; c) To improve the insulation and greening of public and private buildings; d) To reduce the vulnerability of the population exposed to health risks related to rising temperatures. 3) Extreme events of rain and hydrogeological risk: a) To improve the hydrological response of the city; b) To make the territory more "resistant" to heavy rainfall; c) To reduce the polluting load on the water conveyed by rain; d) To increase the resilience of the population and assets at risk.

3.3. Digital transition and Green Deal

More generally, the *European Green Deal* intends to represent an overall strategy for resolutely embarking on the path of energy transition and environmental education. Of course, this path cannot be separated from a strong focus on ICT[9] and digital innovations, tools considered essential to accompany the ecological change to be completed by 2050. In accordance with the scientific debate [25,26], the role of ICT is considered fundamental for optimizing energy consumption and efficiency. promote the circular economy, improve the allocation of resources, reduce pollution and harmful emissions, combat the loss of biodiversity and environmental degradation. From a formal point of view, there were two essential steps. In December 2020, in the middle of the COVID 19 pandemic, the EU Council approved the guidelines for the digital transition, which will be followed by a Plan approved by Parliament, entitled *Digitalization for the benefit of the environment*.

[8] Look at at http://www.comune.bologna.it/media/files/monitoraggio_blueap.pdf, last accessed on September 2021.

[9] Look at https://digital-strategy.ec.europa.eu/en/news/eu-countries-commit-leading-green-digital-transformation, last accessed on September 2021.

In 2021 as many as 26 countries—Austria, Belgium, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia , Spain, Sweden, Norway and Iceland. Croatia and Hungary, together with Norway and Iceland, have instead signed the Ministerial Declaration entitled *A Green and Digital Transformation of the EU*. This document[10], based on the premises of the *Digitalisation for the benefit of the environment* program, is important because it identifies the amount of resources, starting from the budget allocated for the post-pandemic recovery, to be allocated to digital: We therefore will work together to use the significant potential of the Recovery and Resilience Facility and the earmarking of expenditure on reforms and investments to support the mutually reinforcing green (at least 37% of funding) and digital transitions (at least 20% of funding). We also welcome the use of other relevant EU instruments for deploying green solutions supporting digital networks, technologies, data and applications to speed up the path to climate neutrality and accelerate the green and digital transition in priority areas such as energy, mobility, agriculture, construction and industry, as identified in the Green Deal and Circular Economy Action Plan. Mobilising investments—public and private—in clean, low-emission and digital technologies as well as in skills and competencies to utilise these adequately, will help create decent jobs and sustainable growth. This will allow Europe to come out from the COVID 19 crisis stronger and greener, and contribute to the uptake of green digital solutions globally. It is important to acknowledge that European technological leadership builds on digital advancements and rapid deployment of green and digital innovations as well as an open and competitive single market.

4. Conclusions

We have awareness, based on an articulated and in-depth scientific debate, that cities represent together the territorial dimension most exposed to the solicitations of environmental problems and the contexts called to a more prompt and choral reaction. In this sense, the *European Green Deal*, with its extraordinary endowment of resources, represents a framework that calls to direct responsibility: companies, territories and communities to support the transition to more sustainable forms of work and settlement. The Committee of the Regions and the Covenant of Mayors played an important role in the programme, reflecting the strategic role of the local level. Within this reflection we then reconstructed the general framework of the interventions related to the digital transition, considered by the EU, absolutely essential to accompany the energy transition and environmental education. This paper, with descriptive intent, has collected the experiences and projects put forward by Italy, focusing on the analysis of Framework Programmes that will help cities to coordinate, implement and monitor the set of environmental and sustainable development policies that will necessarily be increasingly crucial to the dynamics of the territories.

Conflict of interest

The author declares no conflict of interest.

[10] Look at https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=74940, last accessed on September 2021.

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