
Are we contributing to a benign Anthroposystem in our Cities?

A reflection on progress with AGENDA 2030 in the territories of the UNECE with six years to go.

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INTRODUCTION

At the turn of this century, the Nobel laureate Paul Crutzen suggested that we are no longer living in the Holocene geological era, but had entered the Anthropocene, a new geological epoch in which humankind is altering the planet and its systems.¹

There are countless ways in which humankind is bringing about these changes that are cumulative, accelerating and altering planetary systems with dire consequences for humankind and all life on the planet. Once any set of variables causes interaction with others, a system is in play where *actions working together as an interconnected and complex network can bring about changes and outcomes that are often unpredicted and can be irreversible.*²

If humans, by our actions, are bringing about discrete, cumulative and complex changes, we are, in effect, curating, by accident or design, an *Anthroposystem* that has been gathering momentum. There have been warnings for decades, but finally, there is near universal understanding and acceptance that these changes are disrupting the Earth's systems with toxic complications for human and natural ecosystems. This existential pre-occupation for humanity concerns the pace and reversibility of these changes and whether, by human intervention, this *Anthroposystem* can be moderated to make it tolerable to human and natural ecosystems, and even make it benign.

This paper begins with “*Transforming our World: The 2030 Agenda for Sustainable Development*” (Agenda 2030), the Sustainable Development Goals and Targets it introduced (SDGs), and research, policy and action based on it.³ We have now passed the halfway point in the journey to 2030 since the adoption of Agenda 2030 in 2015 and is therefore an appropriate point to reflect on the journey so far and raise some halftime questions as we enter the second period to 2030.

With the Paris Agreement and Habitat III as starting points, the case study reflects on the work of the UNECE Committee of Urban Development, Housing and Land Management in support of Agenda 2030 in anticipation of the adoption of the Pact for the Future at the UN General Assembly in September 2024.⁴ The case content has been selected to provide more granular insight into the realities of enacting the SDGs in cities.

AGENDA 2030 & THE SDGS

"Transforming our world: the 2030 Agenda for Sustainable Development" (Agenda2030) was adopted by the General Assembly of the United Nations in October 2015.⁵ Agenda 2030 was a key text presented to, and adopted by, the Parties at the UN Climate Change Conference (COP21) in Paris on 12 December 2015. The Paris Agreement was signed formally on Earth Day 2016 at the United Nations Headquarters in New York⁶ and was entered into force in November 2016 after ratification by 55 countries responsible for

at least 55% of global greenhouse gas emissions.⁷ The Paris Agreement is a legally binding international treaty on climate change.⁸

Agenda 2030 is a “*supremely ambitious and transformational vision*”⁹ to be achieved through global action based on the three pillars of Sustainable Development – economic, social and environmental. Given that documents adopted by the UN and its agencies must reach consensus agreement among member states, Agenda 2030 is a remarkable achievement in international diplomacy. Arguably, from a global perspective, it is the principal instrument currently in force that can and does, inform and underpin action in support of Sustainable Development to combat climate change and it provides a common and universally accepted language and framework for partnership, communication, implementation and action.

To the credit of those who drafted it, Agenda 2030 is a concise document comprising a preamble, a declaration and a schedule of 17 Sustainable Development Goals with 169 Targets. It commits the UN and its signatories to advancing the five “Ps” (*People, Planet, Prosperity, Peace and Partnership*) and to “*working tirelessly for the full implementation of this Agenda by 2030*”.¹⁰ This paper is interested in exploring examples of research, implementation, outcomes and lessons learned from action contingent on the Agenda’s principles and goals.

The language of Agenda 2030 is clear and urgent in tone with little use of conditional tenses. Anyone with experience of the UN, its agencies and committees, will understand how challenging it is to achieve consensus on any use of language that is unambiguous in intent, positive in tone and affirmative in commitment to action. In this respect alone the Paris Agreement and Agenda 2030 are a testament to the process by which these were brought into play. Agenda 2030 touches on every aspect of life, economy, society and species on the Planet and because of its internationally adopted legal mandate and widespread support, it gives agency to member states, their regional governments and cities, to become involved in, and prosecute advancement of, the Agenda and the Goals to work towards common outcomes that will contribute to meetings Targets locally, nationally and globally. This is easier said than done.

“All countries and all stakeholders, acting in collaborative partnership, will implement this plan.”¹¹

From the outset, the SDGs were presented, communicated and discussed using a visual identity made up of the individual graphic icons for the 17 SDGs illustrated as a matrix. This was an effective mnemonic to imprint the SDGs in the collective consciousness and served well (and still does) as an identifier. But it gives little insight into the interactive and systemic action required and a circular logo was adopted to help signify this dynamic reality. (Fig.1, Fig.2)



Fig.1 The SDGs as a grid (UNDESA)



Fig.2 The SDGs as a wheel (UNDESA)

As work began in earnest in the dedicated pursuit of individual SDGs, ever more complicated diagrams were developed to communicate the complexity of interactions between the SDGs such as UN-Habitat's infographic about SDG 11 (Fig.3). By the time of the COVID-19 pandemic in 2020, the overarching importance of the systemic nature of forces influencing the SDGs was abundantly clear and communicated in the Secretary General's Policy Briefs along with the stark message that the pandemic as a global event had significantly delayed progress with the SDGs.¹² (Fig.4).



Fig.3 SDG 11 interactions (UN-Habitat)

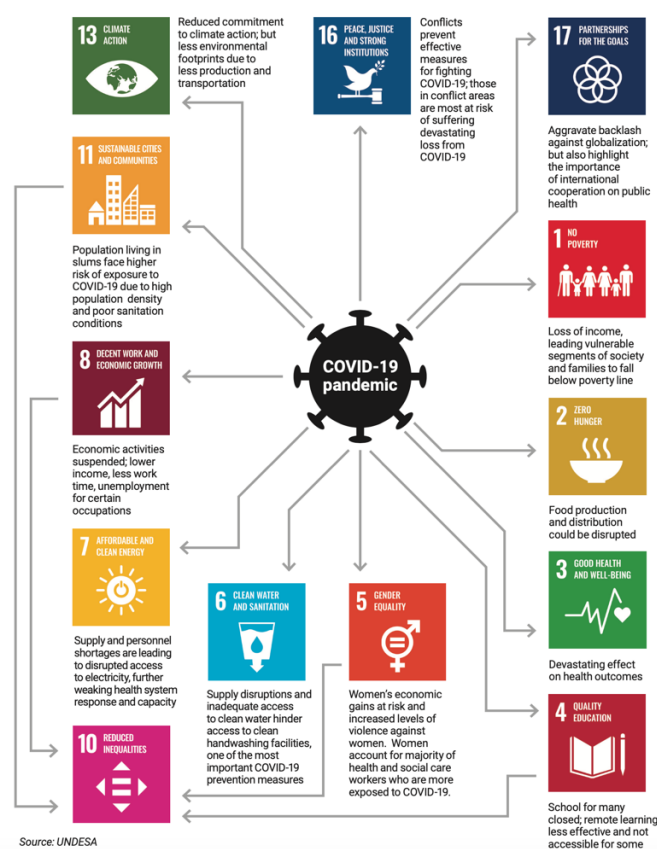


Fig.4 COVID-19 Pandemic had a negative effect of progress with the SDGs (UNDESA)

Urbanism is an integrative discipline that seeks to design and deliver intentional positive outcomes for the city rather than succumb to entropy in the system.¹³ To a researcher, policy adviser and practitioner in urbanism, there are key passages in the text in support of putting Agenda 2030 into operation for cities, and building procedures for their implementation, delivery, outcomes and monitoring. There is a clear message that encourages the integrative and systemic nature of design and urbanism:

*“On behalf of the peoples we serve, we have adopted a historic decision on a comprehensive, far-reaching and **people-centred set of universal and transformative Goals and targets.**” (Article 2)*

and

*“These ... universal goals and targets ... are **integrated and indivisible** and balance the three dimensions of sustainable development.” (Article 5)¹⁴*

As an urbanist, these phrases, with author’s emphasis, are an invitation to put people, and the agency they have from the communities, cities and governments that represent them, at the centre of delivering Agenda 2030 working locally for community benefit coincident with global action for humanity and life on the planet. It is a manifestation of the aphorism *“think global, act local”*.¹⁵ It puts redemption in our hands, and invites systems thinking. The case study described here for the UNECE looks at this in practice, building on the significance and legacy of Habitat III that acted as an accelerant in the implementation of Agenda 2030 before the COVID-19 pandemic acted as a break.

THE CENTURY OF THE CITY: HABITAT III & THE NEW URBAN AGENDA

*“One in every ten people lived in urban areas a century ago ... by 2050 ... almost three-quarters of the world’s population will call urban areas home”.*¹⁶

In the first years of the 21st century, this trend and its consequences, became a central preoccupation in the collective consciousness and a primary focus of attention for the United Nations. In 2008, the Rockefeller Foundation captured this zeitgeist in the provocatively titled work *Century of the City: No time to lose* published following their 2007 urban summit with an ambition to reach a global audience.¹⁷ This simple title captured the essence of the proposition in a phrase and added an attention-grabbing strapline to convey urgency in addressing the issues before us. The book, a collection of essays, factual, polemical, informative and timely, was ultimately a call for global leadership to confront the challenges faced by the prevailing direction of travel. It is a seminal work and had three aims: a simple, concise expression of a complex trend in human habitats; a need for urgency in understanding and facing the consequences of this trend; and a convincing call for enlightened global leadership to address the complexities of this paradigm shift in human living with its consequences for human and planetary systems. Arguably it achieved all three.

Every 20 years, the United Nations stages a global conversation to produce a ‘report card’ on the human habitat. These vicennial world conferences began in Vancouver 1976, continued in Istanbul in 1996, with the third in Quito in 2016. Habitat III was configured to embrace and advance Agenda 2030 to address climate change and, in recognition of the rural to urban shift, the Secretary General signaled a change in emphasis for H-III to focus on cities, with the express intention of developing a new manifesto for action expressed as *the New Urban Agenda*.¹⁸ This became the fountainhead for, and principal driver of, Habitat III.

The New Urban Agenda aimed to be a concise, action-oriented, forward-looking, and universal framework of actions for housing and sustainable urban development.¹⁹ As part of the preparation for Habitat III, the Secretary General asked each of the five regional Commissions of the UN to produce a report on trends

affecting the cities of their region. The brief was two-fold: to identify trends in cities of the region between Habitat II (1996) and Habitat III (2016), and to speculate about the continuation of these trends towards 2030, the time horizon adopted for Agenda 2030.

United Nations Economic Commission for Europe

Habitat III, The New Urban Agenda and the Geneva UN Charter on Sustainable Housing

The United Nations Economic Commission for Europe (UNECE) is one of five regional economic and social commissions that together cover the territory of the inhabited earth.²⁰ The UNECE has 56 member states extending in scale from the three continental countries of Canada, the United States and the Russian Federation to the three microstates of Andorra, Monaco and San Marino together with 50 states of Western and Eastern Europe, and Eurasia.²¹ The UNECE territory encircles the Arctic Ocean and extends across the northern hemisphere from Vancouver, Canada to Vladivostok, Russia and is home to 17% of the world's population. The Regional Report was commissioned jointly by the UNECE, the European office of UN-Habitat, and the Habitat III Secretariat. The report was submitted in evidence to Habitat III, adopted by the UNECE and published in 2017.²²

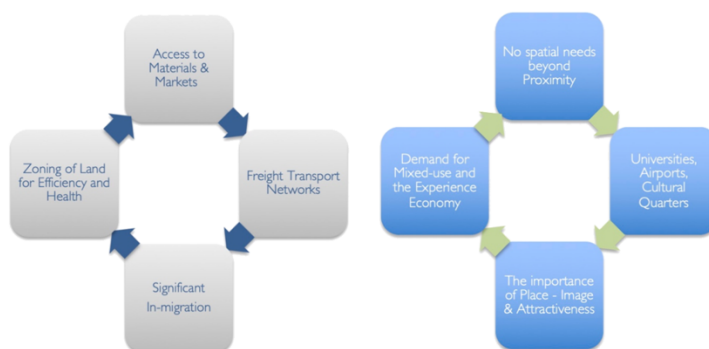
The UNECE territories have over 260 cities of 500,000 or more population with six megacities – Moscow, Istanbul, Paris, London, New York and Los Angeles.²³ The report's findings and conclusions may be summarised briefly as follows:

(i) The Shift from the Industrial City to The Knowledge City

Since 1976, there has been a paradigm shift from industrial cities where the means of production is based on primary and secondary industries (extraction of raw materials and manufacturing) to knowledge cities where the means of production is predicated on tertiary industries (science, technology, tourism and place). The research identified this trend across the territories of the UNECE and give clarity to the proposition of *post-industrial* as a transition away from one state or type of city to an urban outcome as yet undefined. The search for this outcome has been a pre-occupation of many cities across the UNECE for decades. (Fig.5)

The Industrial City:

The industrial economy reshaped cities and regions through development and redevelopment, to produce lifestyles and forms that differed from agrarian and mercantile economies. Manufacturing reorganised access to materials and markets, created and controlled transport networks, attracted large numbers of workers to cities, and set up rigid routines of work reflected in the patterns of spatial and social organisation.



The Knowledge City:

The knowledge economy has new conditions for economic production, social conditions and cultural institutions. Knowledge as a productive capacity has no spatial requirements beyond clusters around universities, science parks and cultural quarters. This encourages the dynamics of agglomeration economies, and has led to the re-emergence of 'place' – the city of streets, squares, stations and neighbourhoods, supported by an 'experience economy' of cafes, restaurants, cinemas, galleries, cultural venues and shopping.

Fig.5 The Industrial – Knowledge Transition (Glasgow Urban Lab)

This predominant trend is real and demonstrable, but not universal. Not every city will be able to make this transition and there are systemic cycles for cities in transition in the 21st century that generate radically different, and at times dispiriting, outcomes.

This analysis casts the soubriquet *post-industrial* as an urban purgatory where redemption is represented by smart sustainable cities²⁴ and perdition by shrinking sprawling cities. This imperfect metaphor helps us understand the likely destination for successful and declining cities today. Research for the UNECE Regional Report produced written descriptors for various positive and negative urban cycles – shrinking, sprawling, compact, resilient – that were later published with accompanying system cycle diagrams.²⁵

(ii) *A trend to urban concentration and the “Jet Age – Net Age paradox”*

The forces driving the industrial to knowledge transition have caused urban concentration. A predicted centrifugal force in cities leading to dispersal of activity and hollowing out of cities described by Cairncross in *the Death of Distance*, Mitchell in *City of Bits: Space, Place, and the Infobahn* and Kasarda in *Aerotropolis* has not come about.²⁶ Instead, The huge growth in affordable air travel in the period 1996-2016 together with the onset of fast and interconnected internet (*the internet of things*) has compounded urban concentration through a concentrating centripetal force.

The *jet-age* of fast cheap air travel combined with the *net-age* of fast digital access have reinforced urban concentration in successful cities but can lead to urban sprawl and urban shrinking in those less fortunate. The *death of distance* (with remote rather than home working) and the dispersed *city of bits* (where internet access rather than physical access predominates) have not come about. Face to face contact remains important in the knowledge and experience economy. The global-local paradox is real. The more similar and inter-connected we become, the more we value local distinctiveness.

(iii) *Few megacities, clusters of knowledge cities and the rise of northern metacities clusters*

The term metacity is used to describe the extremely large metropolitan centres (of a scale order different to megacity) with populations of 20 million or more such as Tokyo (37mio), Shanghai (25mio), Lagos (21mio), Sao Paulo (22mio), Mumbai (25mio), Seoul (25mio).²⁷ The UNECE territories have six megacities but as yet no metacities although some come close. However, the combination of mobility and communication that has accelerated urban concentration has also led to the clustering of cities, where cities within a one-hour travel distance of one another can combine to share scale of economic activity. These polycentric clusters and powerhouses of economic activity were described as *supercities* by the report’s authors.²⁸

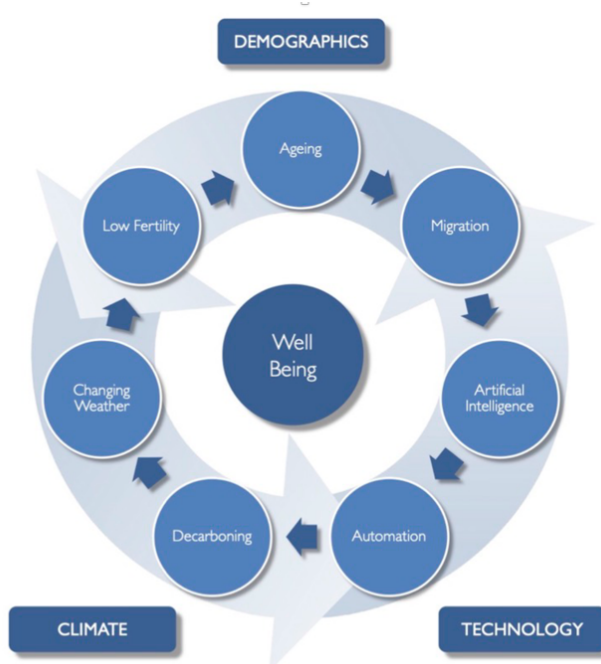


Fig.6 A benign or toxic cycle of change (Glasgow Urban Lab)

(iv) A basket of systemic trends combining in different ways in different cycles of cities

Ageing, fertility, migration, climate change, automation and artificial intelligence combine in systemic ways that create cycles that move at different rates and different combinations in different cities. (Fig.6). These can become self-fulfilling cycles and once embarked on can accelerate and become irreversible.²⁹

These trends stimulate different cycles in cities, some of them are negative, shrinking or sprawling, and some are positives compact, resilient and competitive cities. (Fig.7) In some cities transition is driven by social, economic and environmental advantage, for others a degree of subvention and encouragement in the transition process is required. With others more existential challenges are present. As Swinney and Thomas have pointed out there are risks associated with attempting to replicate past success.³⁰ The cities that have made, or are making, the industrial to knowledge transition are those that can demonstrate willingness and capability for reinvention with clear progress towards SDG targets. Those that cannot, present risks to themselves and to progress with Agenda 2030. In most urban systems in the advanced, developed and developing economies of the UNECE all three sub-types are present and therefore hinder, to varying degrees, overall progress of the system towards Agenda 2030 goals and targets. Understanding of, and radical action in, shrinking and sprawling urban subsystems will be essential for delivery of the SDGs and any escalation of the pace of their delivery. To achieve this will require a more sophisticated understanding of urban systems and how intervention may be brought about for the whole urban system, not just the individual city.

These changes are very clear in certain cities and help to inform why all cities might aspire to being smart and successful, but not all can be, without significant intervention and a more radical appraisal of what makes cities failing and what change can be brought about in their fortunes. These trends have produced stars and have also produced duds where the cities and their communities feel left behind engendering alienation and despair in their people. Many of UNECE member states experience this dichotomy and the debate it stimulates is particularly prominent in the USA and the advanced economies of Europe (UK, France, Germany) stimulating discord and unhelpful political discourse.

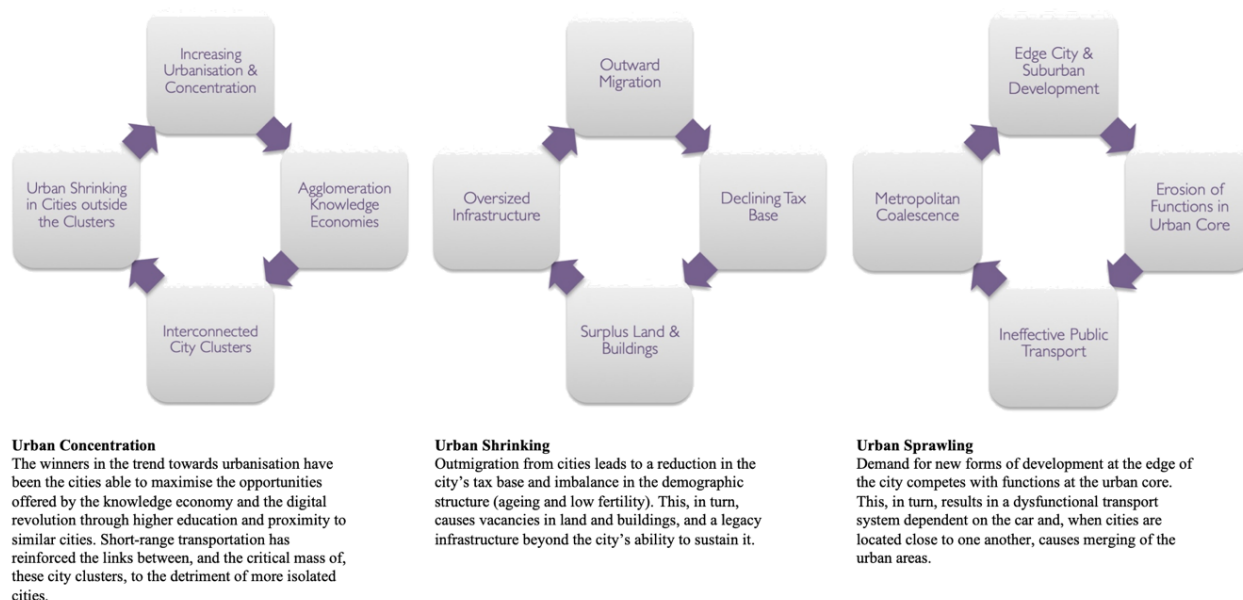


Fig.7 Concentration, Shrinking and Sprawling City Cycles (Glasgow Urban Lab)

Taking forward the findings of the H-III Regional Report lies with the UNECE's Committee for Urban Development, Housing and Land Management. It is important to note a significant Committee initiative

that preceded the publication of Agenda 2030 and the preparation of the Regional Report. The *Geneva UN Charter for Sustainable Housing* was adopted by the Committee in 2013.³¹ With core principles of *Environmental protection, Economic effectiveness, Social inclusion & participation, and Cultural adequacy*, the Geneva Charter stimulated a great deal of interest and support among member states, and the Committee determined that this work should be congruent with action aligned through the Goals and Targets of Agenda 2030 and the Regional Report's findings. This was achieved through expert best practice groups in regional meetings and conferences.³²

Progress with this work stimulated an intent to be more explicit in references to Agenda 2030 goals and targets to assist member states and their cities through recent initiatives including:

- a) *People-smart sustainable cities*: that highlights how different cities have different capacities to cope with crises arising from the COVID-19 pandemic and how the economic effects of lockdown have disproportionately affected different cities as well as different groups of the population with the most vulnerable groups of society suffering most.³³
- b) *#Housing2030*: Effective policies for affordable housing in the UNECE region developed within *#Housing2030*, a joint international initiative of UNECE, UN-Habitat and Housing Europe, exploring housing affordability challenges and existing policy instruments for improving housing affordability in the UNECE region and the exchange and dissemination of good practices in best practice among countries and cities of the UNECE³⁴
- c) *Place and Life in the ECE – A Regional Action plan for 2030*: that brought city trends and housing trends into alignment with Agenda 2030, SDGs and the UN Geneva Charter and principles.³⁵ (Fig.8)
- d) *Development of indicators*³⁶

This work has been accompanied by the development of two networks to help localise the work for cities within member states:

- e) The Geneva UN Charter Centres³⁷
- f) Forum of Mayors³⁸

This granularity brings the SDGs closer to people, communities, neighbourhoods and cities where outcomes can be effected and aggregated.

Following the evolution of this work, it is clear that there is an interrelated and systemic relationship between the 17 SDGs and whereas the pursuit of a particular SDG through specialist expertise is to some extent inevitable, it cannot be undertaken in isolation. Action and work in pursuit of a specific SDG with particular targets is sound in terms of Agenda 2030, but also requires understanding and balancing of effects on other SDGs and, in systems terminology, may mean that the best action in pursuit of an individual SDG target maybe suboptimal in terms of the specific, but with a better outcome for the overall, result. Systemic interaction is important but often implicit or little understood. (Fig.9)

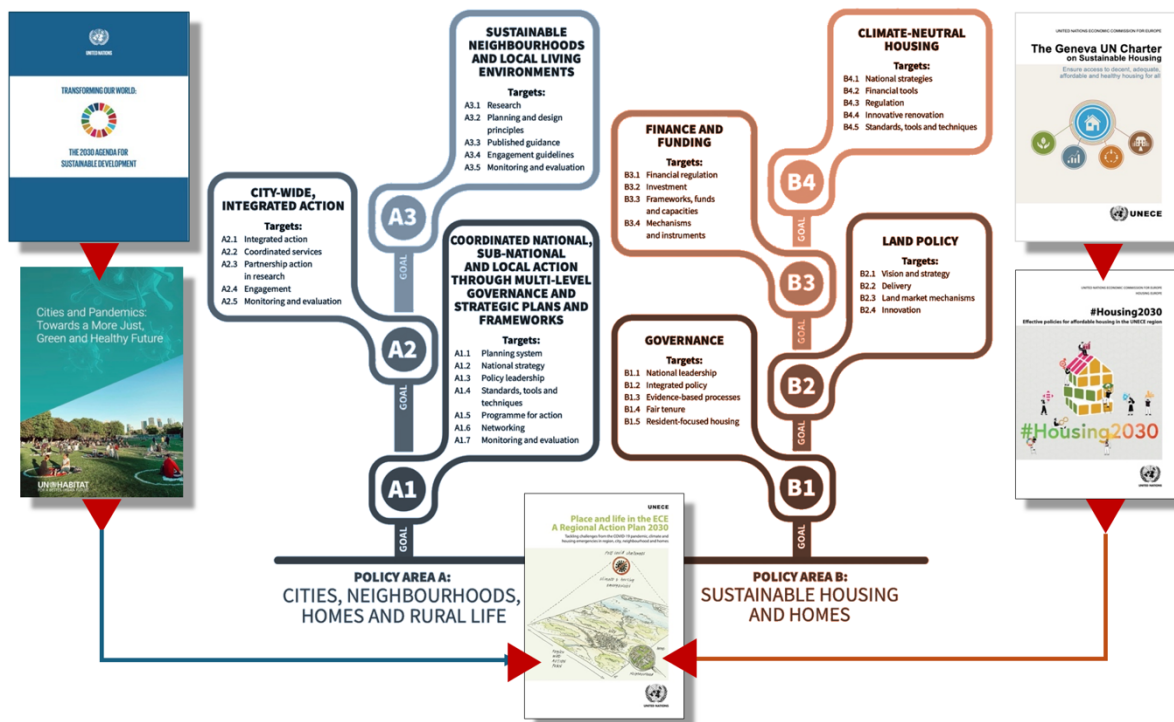


Fig.8 Place & Life in the ECE: A Regional Action Plan 2030 Integrated Policy Action (UN-Habitat/UNECE/Glasgow Urban Lab)



Fig.9 The complexity of SDG checks and balances within the city space (UNDESA/Glasgow Urban Lab)

CONCLUSIONS AND REFLECTIONS

“Cities are where the Climate Battle will largely be won or lost”

*UN Secretary-General*³⁹

“We believe the best way to tackle climate change is through reducing energy use and waste and using local spaces to grow food that bring immediate practical benefits to local people.”

*SouthSeeds, Social Entrepreneur and Community Climate Activist, Glasgow*⁴⁰

As one of five commissions of the UN responsible for Regional Development, the UNECE has, at the halfway point to 2030, made huge steps forward in understanding, coordinating, promoting and advocating the implementation of Agenda 2030 and the SDGs within and across its member states. Working with UN-Habitat and other partners, the Committee for Urban Development, Housing and Land Management has documented and disseminated strategic urban challenges and solutions across the region.

Through a number of actions, publications and advice, the Committee has brought into register research on cities and on housing and has developed an action plan with policies, goals and targets for coordinated implementation. It has done this consensually with members states through developing and guiding the formulation of Charters and Declarations. The Committee has acted creatively to inform and empower cities across the region and their appetite to participate in the delivery of Agenda 2030 through the development of two co-created networks to assist members and it has worked to overcome the delays to the 2030 Agenda brought about by the COVID pandemic.

This work has informed an understanding of the complexities of Agenda 2030 SDGs and their interactions and brought into sharp focus the need for a better systems understanding of the interactions that is not yet in place. Goals, principles, targets, and indicators are undoubtedly necessary and useful tools. They tell us where we are going, what we have achieved and where, but do not inform us how to confront and overcome challenges in order to escalate action. The Secretary General has rightly avowed to accelerate and “turbocharge” the implementation of the SDGs through the *Pact for the Future*. But more work will be required to develop better tools for understanding the systemic interaction of actions pursuant on delivery of SDGs and also assist the understanding of working with differing types of cities where some, by their nature and circumstances beyond their control, are going in a direction of travel opposite to that of Agenda 2030 where ill-informed intervention can replicate old habits in the interest of short term economic benefit for example the opening of new licenses for carbon extractive industries such as fracking and further oil exploration and development.

We can expect willing from the proto-knowledge people-smart sustainable cities and expect push back from those who feel left behind. Systems tools need to be developed to embrace both groups of cities or the promise of Sustainable Development as defined by Agenda 2030 will be inhibited.

Figuring out how the *Anthroposystem* can be made benign to human and natural ecosystems such that all can embrace it remains the biggest challenge to the *turbocharging* process. It requires a system that has the elegance, simplicity, promise and accessibility of the Agenda 2030 mission document that works for all, not just some. New systems tools are required to work with progress towards outcomes in real time that show where interactions between SDG/Ts complement or inhibit one another.

It is suggested that the network of UNECE Centres of Excellence, working through the Secretariat and in concert with the Forum of Mayors, seek to coordinate knowledge of existing systems tools that can be assembled and augmented, probably through AI, to establish a common platform that could be accessible across the cities of the UNECE to pool and share data. This would require engagement with large private sector technology companies. The aim might be to engage with open-source technologies, international partners and avoid seeking the perfect system, in order to develop simple available tools that have the clarity and commonality of Agenda 2020.

The changes foreseen through *the Pact for the Future* will require, at the very least, updates and amendments, and will need systems thinking, design thinking and an inversion of the process – in order to see ‘out’ from communities as well as ‘in’ from governments. Action at speed is required to confront the climate, housing, and biodiversity emergencies and why we need such enhanced systems.

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² Oxford Dictionary of English

³ *Transforming our World: The 2030 Agenda for Sustainable Development*, UN General Assembly Document A/RES/70/1, October 2015, Accessed August 23, 2024

<https://documents.un.org/doc/undoc/gen/n15/291/89/pdf/n1529189.pdf>

⁴ Pact for the future Available at <https://www.un.org/en/summit-of-the-future> Accessed August 29, 2024

⁵ On 25 September 2015, the 193 countries of the UN General Assembly adopted the 2030 Development Agenda titled "Transforming our world: the 2030 Agenda for Sustainable Development." This agenda has 92 paragraphs.

⁶ Available at <https://unfccc.int/process-and-meetings/the-paris-agreement> Accessed August 29, 2024

⁷ Trevor Nace, *Earth Day 2016: A Historic Day for Earth's Future* available at

<https://www.forbes.com/sites/trevornace/2016/04/12/earth-day-2016-historic-day-earths-future/a>

Accessed 23 August 2024

⁸ The agreement was open for signature from April 22, 2016 to April 21, 2017 and was entered into force as an international treaty in November 2016. The agreement is legally binding and universal, and it was the first time almost all the world's nations agreed to cut greenhouse gas emissions. The agreement operates on a five-year cycle, with each country submitting an updated national climate action plan (NDC) every five years. NDCs outline the actions countries will take to reduce greenhouse gas emissions and adapt to rising temperatures. Available at

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available at: https://unfccc.int/sites/default/files/english_paris_agreement.pdf

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⁹ Agenda 2030 Articles 2 and 7

¹⁰ Agenda 2030 Declaration Article 2

¹¹ Agenda 2030 preamble.

¹² UN Covid Policy Briefs

Available at

<https://unsdg.un.org/resources/shared-responsibility-global-solidarity-responding-socio-economic-impacts-covid-19>

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<https://sustainabledevelopment.un.org/content/documents/26456SGReportSocioEconomicImpactofCovid19.pdf>

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¹³ Brian Evans, "Urbanism is the path to urbanity", *Here & Now*, AoU Journal No.5, Spring 2015

¹⁴ Agenda 2030, Articles 2 and 5

¹⁵ The phrase "*think global, act local*" is thought to have originated with Patrick Geddes, a Scottish urban planner and conservationist in the early 20th century. The phrase is used in many contexts, including: environmental challenges, where it's more effective to reduce your own energy consumption than wait for global action and International Marketing where brands need to be globally consistent while also having local reach.

¹⁶ Neal R Peirce, Curtis W. Johnson and Farley M Peters, *Century of the City no time to lose* The Rockefeller Foundation, 2008, p7

Paul Swinney and Elli Thomas, *A Century of Cities: Urban Economic Change since 1911*, Centre for Cities (2015)

¹⁷ Neal R Peirce, Curtis W. Johnson and Farley M Peters, *Century of the City no time to lose*

¹⁸ The new urban agenda is available at <https://habitat3.org/the-new-urban-agenda/> Accessed 20 August 2024

¹⁹ The new urban agenda <https://habitat3.org/the-new-urban-agenda/>

²⁰ The five regional commissions were established by resolutions of the United Nations Economic and Social Council to promote regional development: Economic Commission for Africa (ECA); Economic Commission for Europe (ECE); Economic Commission for Latin America and the Caribbean (ECLAC); Economic and Social Commission for Asia and the Pacific (ESCAP); Economic and Social Commission for Western Asia (ESCWA) Further information available at: <https://research.un.org/en/docs/unsystem/regionalcommissions> accessed 29 August 2024

²¹ Member States of the UNECE Available at <https://unece.org/member-states> Accessed 25 August 2024

²² The UNECE Regional report for Habitat III Available at

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Submitted to the Habitat III Conference:

<https://habitat3.org/documents-and-archive/preparatory-documents/regional-reports/>

²³ Megacities are considered to be cities with a population of over 10 million. Characteristics of megacities include population, large surface areas, and extensive transport systems. Important global cities that are key in the economic system.

²⁴ Smart sustainable cities. Further information available at

Website

<https://unece.org/housing/smart-sustainable-cities>

Document

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²⁵ UNECE Regional report for Habitat III pp 66-69

²⁶ Aerotropolis: The Way We'll Live Next, John Kasarda , Greg Lindsay

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²⁸ Brian Evans, Pietro Elisei, Orna Rosenfeld, Gulnara Roll, Amie Figueiredo and Marco Kleiner (2016), Habitat

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²⁹ The trends are discussed in the Regional Report and the cycles are described in RR at pp 6-69 and they were developed as circular system diagrams that were not included in the final report but were subsequently published in other research and developed in diagrammatic form see *Scotland's Urban AGE: Aberdeen, Glasgow and Edinburgh in the Century of the City* (2018)

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³⁸ UNECE Forum of Mayors

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