A role for local government in global environmental governance and transnational environmental law from a subsidiarity perspective

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Abstract

This article advances a conceptual view of the role of local government in global environmental governance ('GEG') and the system of transnational environmental law ('TEL'). The underlying hypothesis is that a deeper understanding of the role of local governments (global cities and smaller local authorities) is expedient as it has the potential to curb some recurring GEG failures and contribute towards improvements in the pursuit of the objectives of TEL. The Merton Rule in the United Kingdom is singled out to exemplify the potential of local government in the pursuit of shared transboundary and global environmental ideals. The Merton Rule refers to a progressive prescriptive local planning policy that requires new buildings to generate at least ten per cent of their energy needs from on-site renewable energy equipment. The broader effect that the Merton Rule has had and the understated emphasis on inter-actor support to be found in the literature on subsidiarity, are combined in three final observations: a) the notion of 'think global, act local' is challenged; b) the individual and joint potential and the capacity of cities and other forms of local government must be unlocked through consistent inter-actor support in the 'new' global context; and c) the role of local governments in GEG and TEL does not point in only one direction.

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INTRODUCTION

The regulation of our planet's resources has become increasingly complex.¹ In the globalised world of 'interconnected nations, economies and people', with its various demands on the management of environmental threats and problems, particularly those that cross political and administrative borders, the call for new and inclusive global, regional, national, and local responses continues to thrive.² While global socio-economic, demographic, and environmental trends have increased, interdependence among countries,³ governance and legal frameworks continue to transform⁴ in order to 'catch up' with the attendant 'globalisation of effects'.⁵

For a constitutional law scholar with a general interest in the intersecting areas of local government and environmental law and governance, the above evokes questions as to the domestic implications of: a) response phenomena such as the rise of global environmental governance (GEG)⁶ and transnational environmental law (TEL);⁷ and b) the role of sub-national governance actors. These questions lie at the heart of the discussion in this article as they challenge the relative abstract nature of GEG and TEL in

Sand 'Lessons learned in global environmental governance' (1991) 18/2 Boston College Environmental Affairs LR 276; Holley, Gunningham & Shearing The new environmental governance (2012) 1–5; United Nations (UN) Environmental Programme Environmental governance (2009 UNFCCC Conference, Copenhagen); IUCN (International Union for Conservation of Nature) Position paper on the institutional framework for sustainable development for the Rio 2012 Conference – effective governance for sustainable development: lessons from nature (2012) available at:

http://www.uncsd2012.org/content/documents/163iucn1.pdf (last accessed 5 July 2015); Renner & Prugh 'Failing governance, unsustainable planet' in World Watch Institute State of the world 2014 – governing for sustainability (2014) 3–4.

The UN confirmed in 2013 that environmental degradation had reached critical levels, that business as usual was not an option and that sustainable development required transformative change at the local, national and global levels. UN Department of Social and Economic Affairs World economic and social survey 2013 – sustainable development challenges (2013) 14–15 available at:

http://sustainabledevelopment.un.org/content/documents/2843WESS2013.pdf (5 July 2015). See also Bulkeley *et al* 'Governing sustainability: Rio+20 and the road beyond' (2013) 31 *Government and Policy* 958–970.

³ UN Department of Social and Economic Affairs n 2 above at 21; Anheier *Governance* report (2013) 12.

⁴ Holley Facilitating monitoring, subverting self-interest and limiting discretion: learning from "new" forms of accountability in practice' (2010) 35/1 Columbia Journal of Environmental Law 128.

See Kolers 'Subsidiarity, secession and, cosmopolitan democracy' (2006) 32/4 Social Theory and Practice 663 who cites David Held.

⁶ GEG is defined below.

⁷ TEL is defined below.

relation to the governing functions of – specifically – sub-national *local* governance actors. For purposes of this article, 'local governments' refer to cities (including so-called 'world cities' and 'global cities' such as New York, London and Tokyo), city governments, municipalities, and other local authorities that denote the lowest government structures within national government systems.⁸

The underlying hypothesis of this article is that a deeper understanding of the role of local governments in the 'new' global context is useful as it has the potential to: a) curb some recurring GEG failures; and b) actively contribute towards improvements in the pursuit of the objectives of TEL.

The article further questions the normative meaning and function of the notion of institutional subsidiarity and its latent significance in the global context. This approach may surprise a reader who is familiar with the ordinary function and application of the principle of subsidiarity. The preliminary assumption is, however, that GEG and TEL can capitalise on the mainstreaming of subsidiarity-thinking. By way of example and in support of this presumption, subsidiarity-thinking is applied to the global energy law and governance context with specific reference to the development of the Merton Rule in the London Borough of Merton in the United Kingdom (UK). The Merton Rule refers to a progressive and prescriptive local planning policy that requires all new buildings to generate at least ten percent of their energy needs from on-site renewable energy equipment.

The first part of the article offers a conceptual overview of GEG and TEL. The second part gives a brief overview of how the role of sub-national local governments in this global context has been described to date. The notion of subsidiarity and what it implies for the inter-relationship between local governments and those governing actors which are generally perceived to have greater governing powers than municipalities/local authorities, are

The analysis and discussion of the complexity with defining 'local governments' falls beyond the scope of this article. Global and world cities are, for example, a distinct and special entity in local government literature while not all local governments look and function in the same way in different parts and countries of the world. This distinction merits further research in the broader context of this article but does not detract from the present reasoning and argumentation.

For example, fragmented governance as briefly discussed in the IUCN Position Paper n 1 above.

These objectives are manifold and wide in scope, but it is trite that the overarching objective is sustainable development.

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examined in part three. Part four is devoted to the potential of local governments in global energy governance and law¹¹ as a specialised sector of GEG and TEL. The aim of this concentration of focus is to examine, by way of example, the relevance of individual local governments which respond spontaneously to environmental issues of global concern. The United Kingdom's Merton Rule on renewable energy is discussed to show the role that individual local authorities can play in global energy governance and law. The broader effect that the Merton Rule has had, and the understated emphasis on inter-actor support to be found in the literature on subsidiarity, are combined in the conclusion and along the lines of three main observations: a) the notion of 'think global, act local' is, by nature, challenged; b) the individual and joint potential and capacity of cities and other types of local governments must be unlocked through consistent interactor support in the global context; and c) the role of local governments in GEG and TEL does not point in only one direction.

A WORLD UNDIVIDED: THE ERA OF GLOBAL ENVIRONMENTAL GOVERNANCE AND TRANSNATIONAL ENVIRONMENTAL LAW

Alexander Pope famously wrote in his *Essay on Man* '... for forms of Government let fools contest; What'er is best administer'd is best'.¹² Various points in recent world history have necessitated 'man' deliberately to debrief supranational governance and the correlated function of law in general.¹³ This is true of both the regional and international contexts. The post-Cold War era with its major shifts in regional and international power

Global energy law and governance are further described in this article.

¹² Pope *An essay on man* (1733) epistle 3, 1. 303–4.

Knight 'Towards a subsidiarity model for peacemaking and preventive diplomacy: making Chapter VIII of the UN Charter operational' (1996) 17/1 Third World Quarterly 31, for example, indicates that for the first fifty-four years of the existence of the United Nations (UN), this 'global' governing body was stymied by a Cold War environment that effectively immobilised the UN Security Council, etcetera. In this instance the threshold juncture for critical shifts was the fall of the Berlin Wall in the late 1980s which left national governments, decision-makers and scholars 'dumbfoundedly' watching a 'seachange' in the UN (including UN governance and law-making) from stagnation to renaissance. Institutional changes in the UN and related changes and convulsions in global politics included the dissipation of bipolar confrontation, tension and mistrust, the collapse of the Communist world as well as growing political fluidity and alignment. More recently, it has, for example, been stated that to address current challenges and to position all countries for global sustainable development after 2015 (that is, following the lapse of the Millennium Development Goal period), a strengthened global development agenda will have to facilitate transformation of inter alia, 'mechanisms of governance'. UN Department of Social and Economic Affairs n 2 above at vii.

relations¹⁴ and its ignition of 'contemporary cosmopolitanism', ¹⁵ for example, coincided with the rise of the notions of global governance and transnational law, and, as species thereof, GEG¹⁶ and TEL. ¹⁷ In recent decades, the notions of both GEG and TEL as manifestations of a 'new' global context, have become inter-linked focal points in the scholarly literature as many researchers and institutions try to make sense of the impact of global changes and developments on the construction and function of environmental law and governance in general. ¹⁸

In recent decades, global socio-economic, demographic, and environmental megatrends have increased the North-South and the inter-country interdependence – albeit without a commensurate strengthening of global governance in certain areas. ¹⁹ One result has been that various environmental and other problems of sustainability remain inadequately addressed. At the same time, many countries have become more exposed and vulnerable to external shocks, with economic, social, and environmental crises spreading more quickly across international borders. ²⁰ It follows that an understanding of the nature and function of TEL and GEG form a significant part of the search for new approaches to environmental governance in a contemporary world that is, in many ways, united. Conceptually, GEG and TEL are distinct 'phenomena' – yet, the inextricable links between them and their nature and normative impact, make it possible to use these terms interchangeably as far as the gist of the argument in the present analysis is concerned.

Anheier n 3 above at 12.

¹⁵ See Kolers n 5 above at 660.

The rise of GEG is more extensively discussed in, *inter alia*, Holley, Gunningham & Shearing n 1 above at 1–5.

The meaning and rise of TEL is more extensively discussed in *inter alia* Shaffer & Bodansky 'Transnational, unilateralism and international law' (2012) 1 *Transnational Environmental Law* 2.

This is evident from the work of scholars in a range of fields including law, governance, public administration, political theory and diplomatic relations. Changing international trade markets and climate change are two prominent examples of global changes that have implications for the development and function of environmental law and governance.

See Holley, Gunningham & Shearing n 1 above at 1–5. Biermann 'The Anthropocene: a governance perspective' (2014) 1/1 *The Anthropocene Review* 58 uses the Anthropocene to explain the present-day 'functional' interdependence between human societies and generations of people.

²⁰ See UN Department of Social and Economic Affairs n 2 above at 21.

Global environmental governance

GEG denotes a so-called 'new' governance architecture, ²¹ as well as a novel form of environmental regulation that transcends the traditional hierarchical state and inter-state activities. ²² In the normative sense, GEG sees environmental governance as flexible ²³ and comprising more than governance by authoritative and formal state and inter-state structures. GEG brings the more inclusive circles of stakeholders and decision-makers ²⁴ closer together in novel ways in that it includes self-regulation by societal actors, private-public cooperation in solving environmental problems, and a variety of new forms of multilevel environmental law and policy. ²⁵ GEG denotes a shift in the understanding of co-regulation of life on earth from (formal) government to inclusive governance which recognises and continues to restructure the roles not only of the public or the government sector, but also of the private and other sectors. ²⁶

During the past two decades a body of literature on GEG and its polycentric features has emerged which conveys ideas and an understanding that stand in stark contrast to the more traditional state-centric ontology of governance.²⁷ Ostrom's work, for example, explains that today we are faced

The phenomenon, design and functioning of new environmental governance architecture are embedded in different theoretical perspectives such as collaborative ecosystem governance and reflexive environmental law as discussed in a number of normative, explanatory and empirical studies. See Holley n 4 above at 129–131.

Some of the features of new environmental governance architecture are explained by Holley n 4 above at 129–134. See also in general Holley, Gunningham & Shearing n 1 above.

²³ See Kotzé *Global Environmental Governance* (2012); Holley n 4 above at 131–132.

See Kolers n 5 above at 664.

It is impossible to discuss the full panoply of actors and processes currently or potentially relevant to an analysis of GEG as shown by Betsill & Bulkeley 'Transnational networks and global environmental governance: the Cities for Climate Protection Program' (2004) 48/2 *International Studies Quarterly* 472–474; Holley, Gunningham & Shearing n 1 above at 1. Florini & Sovacool 'Who governs energy? The challenges facing global energy governance' (2009) 37 *Energy Policy* 5241 and the published research of the Earth System Governance project available at:

http://www.earthsystemgovernance.org/publications (last accessed 20 August 2015).

See Betsill & Bulkeley n 25 above at 474.

Traditional state-driven, top-down governance approaches predominantly anchored in the law and command and control regulation, are now complemented, and sometimes even challenged, by shared public and private authority, an increased emphasis on bottom-up governance, cooperative partnerships between different actors, voluntary standards, codes of conduct, business self-regulation, etcetera in a system of multi-level yet non-hierarchical environmental governance. See Gulbrandsen Transnational environmental governance (2010) 6, 131–132; Holley, Gunningham & Shearing n 1 above at 4; Sassen 'A focus on cities takes us beyond existing governance frameworks'

with polycentric environmental governance that conceives of a *smörgasbord* of centres of decision-making and action which are formally independent of each other but which function within an interdependent system of relations. From an environmental governance perspective, the net result – even though not yet fully understood – is that: a) the pursuit of sustainability takes place in an institutional framework that operates worldwide at and between a variety of territorial and functional scales which; b) involve a plethora of new and familiar governance actors with varying degrees and types of authority.

It follows that novel approaches to environmental governance are evolving to challenge the existing knowledge-bases of national constitutional law scholars and others on the domestic front, regarding the 'institutional' position, role, function, and powers of, and the relationships between, different governance actors. One such actor is local government which is traditionally situated as the 'governed'29 and the 'governing'30 sub-national organs of state in domestic government structures, which typically derive their governing power from domestic law – for example, constitutional, local government law, and environmental law. Some typical examples that denote local governments as agents of GEG, include their design, adoption, and implementation of local environmental policies, by-laws, spatial and strategic management plans, procurement arrangements, programmes, public-private partnerships, and projects that regulate the behaviour of civil society as well as local and foreign industries, investors, and funders. A more concrete example is the involvement of municipalities in CDM (Clean Development Mechanism) initiatives in terms of which, in line with the Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1998 (UNFCCC), municipalities in developing countries become involved in emission-reduction projects through landfill-to-gas technologies that involve trade in certified emission reduction (CER) credits.

in Stiglitz & Kaldor (eds) The quest for security: protection without protectionism and the challenge of global governance (2012) 238–259.

²⁸ See the discussions by Holley, Gunningham & Shearing n 1 above at 4; Dente 'The transformations of regional and local governments: implications for environmental policy integration' in Goria *et al* (eds) *Governance for the environment* (2010) 80.

Referring to the fact that municipalities are institutions that are subject to the rules and regulations of national and provincial or state level authorities.

This is with reference to the fact that they have authority over the people and actions within their allocated areas of jurisdiction.

Transnational environmental law

In relation to GEG, the law remains a key mechanism by which societies, activities within and between states, as well as the interrelationship between GEG-actors are regulated. The law (including TEL) is regarded as an element of governance³¹ (including GEG) with law and law-making being significant determinants of governing authority in general.³² The law also promotes governance in accordance with objective legal prescriptions, and holds at least some governance actors accountable in terms of preordained rules (the rule of law) through the work of international and national courts and other judicial, adjudicative, and enforcement mechanisms.³³

As suggested above, in the new global context the law is no longer the logical system of enforceable international and domestic rules and principles that we used to know. Holley explains that the role of conventional law in new governance architecture lies in its hybrids – in new ways of governing.³⁴ The law has become a more flexible concept, comprising positivist rules, soft law principles, statutorily set norms and standards, industry standards, formal and informal prescriptions from different governance institutions, international and domestic administrative directives, and relevant customs and practices – 'a combination which necessarily leads to inconsistency, uncertainty and indeterminacy in law's province'.³⁵ In the context of TEL, sharp distinctions between private and public law, soft and hard law, and domestic and international law are blurred. Despite this apparent fragmentation, the law has retained much of its regulatory function.³⁶

Although it may seem to have lost some of its perceived rigour, the law, including environmental law, still functions to set out basic rules and principles and to instruct and direct all global governance actors.³⁷ Although

See Kotzé n 23 above at 11–16.

Waincymer 'Private dispute resolution as an instrument of governance' in Boulle (ed) *Globalisation and Governance* (2011) 126.

See for an exposé of the challenges experienced in this regard, Holley n 4 above at 132–136

Holley n 4 above at 210.

Boulle (ed) Globalisation and Governance (2011) 6.

See the critical analysis of Sassen 'Bordering capabilities versus borders: implications for national borders' (2009) 30 *Michigan Journal of International Law* 571–596 regarding the 'new phase' of bordered authority and the role of the law.

A fair number of examples that existed by 1991 are provided by Sand n 1 above at 213–277.

the underlying GEG issues may be profoundly political in nature, the law still largely determines the division and exercise of governing authority.³⁸

Significantly, despite the misleading 'international' ring to its name, TEL encompasses, but is broader than, international environmental law in that it refers to all environmental law rules and norms that apply to trans-boundary activities or that have an effect in more than one jurisdiction.³⁹ As such, TEL includes national environmental law rules and norms that have, or could have, a horizontal effect across jurisdictional lines in an international sense. This understanding of TEL flows from the view that in the new global context characterised by political and institutional co-existence, codependence and GEG, environmental and other fields of law no longer operate in single or confined pluralistic sites. In relation to local governments, this insight is significant to the extent that it means that the law produced by local legislative authority (eg municipal environmental bylaws binding on foreign investors, or municipal zoning schemes binding on multinational mining companies) form part of the total body of TEL. By the same token, local authorities may be bound by sources of TEL of which they were largely ignorant a few decades ago. These sources include, for example, industry-specific standards of the kind that apply to public-private partnerships between a municipality and a private service provider.

TEL, therefore, regulates both explicitly and implicitly, all governance actors in an inclusive global system through a complex hybrid of local (municipal), domestic (national), regional, and international environmental law systems.

LOCAL GOVERNMENTS AS SUB-NATIONAL ACTORS IN A GLOBAL ENVIRONMENT

While existing literature on GEG and TEL explicitly acknowledges the role of local authorities, 40 scholars and others remain largely in the dark about the

See De Burća 'The principle of subsidiarity and the court of justice as an institutional actor' (1998) 36/2 *Journal of Common Market Studies* 219.

Shaffer & Bodansky n 17 above at 2.

See, for example, Zimmermann 'How local governments have become a factor in global sustainability' in World Watch Institute *State of the world 2014: governing for sustainability* (2014) 152–153; Pasquini & Shearing 'Municipalities, politics, and climate change: an example of the process of institutionalising an environmental agenda within local government' 2014 *The Journal of Environment and Development 2*; Sassen 'Cities are at the center of our environmental future' (2010) 2/3 *SAPIENS* 1–8; Aust 'Auf dem Weg zu einem Recht der globalen Stadt? "C40" und der "Konvent der

optimal performance and 'active' participation of 'local' actors. It was indicated above that, as GEG actors, local authorities are simultaneously bound by, and creators of different types of TEL instrument which exacerbate the depth of the peculiarities regarding the role and function of local authorities. It means, for example, that they may be bound by multilateral treaties and foreign country laws aimed at CO₂ reductions while they may also, as a result of duties they accrue in terms of global developments in law, make local by-laws dealing with climate mitigation measures for the local setting. Typical examples are building regulations, spatial plans and zoning schemes, as well as solid waste management and water services provision by-laws. However, there is also a third dimension: local government's physical involvement in the creation, and especially the eventual implementation (albeit indirectly), of some of the international sources of TEL such as multilateral agreements dealing with biodiversity conservation, the protection of the marine environment, the banning of certain hazardous chemicals, food labelling, or waste management.

Local authorities usually have original, assigned, and derivative regulatory powers in terms of national and/or provincial/state constitutions and legislation, that vary in design and specifics from one country to the next. From a domestic constitutional law-perspective, this further clouds any clear or blanket understanding of the role of local governments in the global arena. All the same, municipalities seem to participate in GEG beyond national borders mostly without any tangible 'governing authority'. Local governments, for example, enter and participate in the deliberation and design of new regional and international environmental law agreements mainly with their practical local experience and feedback capability. These authorities further participate with a pervasive awareness of the power that national and sub-national authorities (for example, provinces or federal states) exercise over them. This explains why local government participation in international law-making (as an aspect of GEG) often takes place through representative international local-government organisations⁴¹ such as the International Council for Local Environmental Initiatives (ICLEI)-Local

Bürgermeister" im globalen Klimaschutzregime' (2013) 73 ZaōRV 686; Holley, Gunningham & Shearing n 1 above at 2; Binder et al Towards an EU approach to democratic local governance, decentralisation and territorial development – European Commission: Background Paper Project No 2007/147439 (2007) 15; IUCN Position Paper n 1 above.

⁴¹ 'Representative' in this context refers to the representation of members but in a more normative sense, also to the representation of local government interests in general.

Governments for Sustainability,⁴² the C40 Cities Climate Change Leadership Group,⁴³ and United Cities and Local Governments. These organisations are open to all interested local governments and are involved in global advocacy processes and improvements in global and local governance.⁴⁴

Their voluntary involvement and absorption in organisations such as C40 and ICLEI aside, in the final instance local governments remain formal creations of domestic constitutional law. This explains why the GEG discourse in some instances inadvertently adopts the attitude that subnational governments, such as cities and other local authorities, act and function under the (sole) influence and direction of national governments. This means that every so often in the international arena, the actual environmental law and policy-making powers and accompanying governance potential of sub-national local governments, are either underestimated, ignored, or implicitly subsumed within the nation-state. The substance of the control of the contr

Considering the source of power of local governments and their constitutional design, some of the indifference arises from the very nature of the new global context as explained earlier. As already indicated, individual organs of state, local authorities are established and empowered in terms of domestic legal instruments to govern⁴⁷ within inflexible, formal,

^{42 (}ICLEI) is an international association of cities and local governments dedicated to sustainable development. It comprises twelve mega-cities, 100 super-cities and urban regions, 450 large cities as well as 450 medium-sized cities and towns in eighty-six countries. ICLEI prides itself in the 'promotion of local action for global sustainability and its support of cities to become sustainable, resilient, resource-efficient, bio-diverse, low-carbon; to build a smart infrastructure; and to develop an inclusive, green urban economy with the ultimate aim to achieve healthy and happy communities'. See ICLEI Who we are available at http://www.iclei.org/iclei-global/who-is-iclei.html (last accessed 5 July 2015). Partnerships exist between the C40 and ICLEI regarding climate action in local government, for example.

C40 is an international network of city governments that describes itself as 'a network of the world's megacities taking action to reduce greenhouse gas emissions. The C40 works with participating cities to address climate risks and impacts locally and globally.'

⁴⁴ Zimmermann n 40 above at 153. Zimmermann also mentions other groups that offer membership to selected cities according to size.

⁴⁵ See Zimmermann n 40 above at 154 for a critical response to this view of the role of local governments and an explanation of the benefits of having local authorities engaged in global cooperation.

Betsill and Bulkeley n 25 above at 476.

^{47 &#}x27;To govern' in this instance comprises several local government functions as is evidenced by one of the definitions that has been proposed for 'local environmental governance': 'the management process executed by local government and communities to holistically regulate human activities and the effects of these activities on their own and the total

and top-down government structures designed for an hierarchical-type governance. Local authorities are further first and foremost responsible for and accountable to local electorates and constituencies. The legislative power of a local authority often resides in 'temporary' local councils made up of politically elected representatives with (locally focused) political agendas, whilst the council shares executive power (the power to design, implement, and maintain short, medium, and long-term local plans, policies, programmes and projects) with a municipal administration, that is, the local government officials. While these may be typical features of democratic dispensations in general, the loss of institutional memory in the type of matters for which local government is responsible (*eg* long- and medium-term strategic planning and sustainable service-delivery), has implications for its consistent recognition and standing among other GEG actors.

Against this background it is really only clear that local governments – regardless of where and to what degree they may be active and participate in the GEG and TEL arenas – eventually execute their regulatory authority and 'act' in national contexts. They do so very close to people – that is, very close to society or the local communities that have elected them, albeit also the very people whose interests are the ultimate foci of most TEL and GEG efforts. Still, as suggested earlier, many agree that in the new global context local authorities play a crucial role in the 'beyond-national-border' pursuit of sustainability and collectively addressing the human impact on the environment.⁴⁹ Two central arguments are that sustainability is highly dependent on strategic and consistent actions at the most local sub-national level of government,⁵⁰ and that sustainability laws and policies agreed to at

environment at local levels; by means of formal and informal institutions, processes and mechanisms embedded in and mandated by law, so as to promote the present and future interests human beings hold in the environment. This management process necessitates a collection of legislative, executive and administrative functions, instruments and ancillary processes that could be used by local government, the private sector and citizens to stimulate sustainable behaviour within the community as far as products, services, processes, tools and livelihoods are concerned, both in a substantive and procedural sense.' See Du Plessis Fulfilment of South Africa's constitutional environmental right in the local government sphere (LLD thesis North West University, 2009) 156.

⁴⁸ This is characteristic of most democratically elected GEG actors though. See further the case study-based discussion of Pasquini & Shearing n 40 above at 14.

⁴⁹ See Zimmermann n 40 above at 154–155; Holley, Gunningham & Shearing n 1 above at 5; and Kotzé n 23 above at 17–19; 187–191.

Svedin *et al* 'Multilevel governance for the sustainability transition' in O'Riordon *Globalism, localism and identity* (2001) 50.

the international or global level, must in the end be refined and implemented locally. Reminded of Sassen's conception of cities as 'frontline spaces',⁵¹ there is little doubt that cities and other local authorities have come to be regarded, together with other sub-national governance actors, as particularly important in addressing global environmental problems.⁵²

Notably, the locally-sourced governing power of local governments can at the same time be: a) a destructive force, for example, as a result of poor local planning or promotion of local economic development at the expense of conservation; and b) part of the solution to global environmental problems (for example, through local urban ecology projects, disaster risk reduction initiatives, and greener procurement).⁵³ This dual impact potential of local government explains the view of some that nation states are unlikely to be able to meet their international commitments to address climate change, for example, without explicit and meaningful engagement with sub-national (local) actors.⁵⁴ The United Nations (UN) Conference on Sustainable Development (Rio+20) recently also highlighted urban sustainability, a local government matter, as part of its reaffirmed commitment to sustainable development and as an extension of the UN's Agenda 21 dating back to 1992.⁵⁵ The UN stated that in years to come many specific sustainable development measures would be designed and implemented at the local level - in cities and towns in particular. 56

Sassen n 27 above at 243; Sassen 'When the center no longer holds: cities as frontier zones' 2012 Cities 1-4.

See Betsill & Bulkeley n 25 above at 477; Binder n 40 above at 3–5; Sassen n 27 above at 239.

Pasquini & Shearing n 40 above at 2.

Betsill & Bulkeley n 25 above at 477.

It has been stated that rapid urbanisation, especially in developing countries, calls for major changes in the way in which urban developments are designed and managed and for substantial increases in public and private investment in urban infrastructure and services. See UN Department of Social and Economic Affairs n 2 above at vi.

See UN Department of Social and Economic Affairs n 2 above at 22. This recognition of the role of local authorities in GEG and TEL is, however, not altogether novel as it seems to complement past thinking in international environmental law. The prominent role of local government in sustainability has, for example, been explicitly discussed in ch 9 of the 1987 Brundtland Report and ch 28 of the UN's *Agenda 21* (1992). A significant number of the eight UN *Millennium Development Goals* (2000) furthermore speaks to areas of decision-making and governance that are in most countries within the local government domain including, for example, the improvement of maternal health, combating HIV/AIDS and ensuring environmental sustainability (*inter alia* via access to safe drinking water and basic sanitation and the reduction of CO₂ emissions). A recent study by Alger further shows how the participation of local government in the UN system has increased in recent years. (Alger *The UN system and cities in global governance*

As GEG actors on the national and international fronts, local governments thus find themselves between and among a range of actors such as state and other sub-state governments, the private sector, civil society, and NGOs. What exactly this implies and entails for local authorities remains not entirely clear. As Sassen⁵⁷ puts it, '(c)ities are *de facto* components of the global environmental governance regime, though they are not so *de jure*'. The role of local government in GEG and TEL is therefore not readily discernible. This demands new knowledge to be generated regarding, for example, local government in relation to GEG and TEL actors with traditionally greater governing authority; the position and role of international local government institutions; and the relevance of the internal structures of local authorities when 'they return home' – for example, politically elected local councils and their sub-committees, municipal administrations, communities, traditional leadership, and local courts. ⁵⁸

SUBSIDIARITY AND LOCAL GOVERNMENTS IN THE GLOBAL ARENA

The evolution of subsidiarity thinking

Even though it is usually adopted in constitutionally designed setups, institutional subsidiarity appears to be one of very few available approaches⁵⁹ that generally explains some aspects of the interrelationship

^{(2014)).} Commentators in, *inter alia*, the climate change discourse have further come to regard cities and other localities as the most appropriate arena in which to pursue policies to address specific global challenges including climate change mitigation and adaptation (see for example Betsill & Bulkeley n 25 above at 477; Richardson (ed) *Local climate change law* (2012); Aust n 40 above at 673–704), waste management and water services provision. See also the significant emphasis on the role of local government in 'nested' GEG in the IUCN Position Paper n 1 above.

Sassen n 27 above at 239.

See Binder n 40 above at 19.

As already suggested, research that consistently describes the normative meaning and function of the interrelationship between local authorities and other governance actors in the global governance context remains scant. Even in national contexts the relationship between local governments and other levels or spheres of government are not always easily discernible. South Africa, for example, adopted a new constitution in 1996 that bestowed novel powers and functions on local government. The domestic courts have often been approached in recent years to provide clarity on the 'new' division of government powers and functions and for clarification on the interrelationship between national, provincial and local government. See, for example, Fedsure Life Assurance Ltd v Greater Johannesburg Transitional Metropolitan Council 1999 1 SA 374 (CC); Government of The Republic of South Africa v Grootboom 2001 1 SA 46 (CC); Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province 2007 6 SA 4 (CC); Beja v Premier of Western Cape 2011 JDR 0412 (WCC);

between and co-existence of different actors in multiple-actor governance systems.⁶⁰

Subsidiarity is chimerical.⁶¹ Sir Leon Brittan described it as 'an ugly word but a useful concept'.⁶² It is nonetheless the epitome of the *principle* of subsidiarity⁶³ – a governance principle often described in contemporary literature⁶⁴ with reference to its place in socio-political Catholic thought⁶⁵ – and its instrumental use in the government structures of both post-war Germany⁶⁶ and the European Union (EU).⁶⁷ The principle has been described

Maccsand (Pty) Ltd v City of Cape Town 2012 4 SA 181 (CC); Johannesburg Metropolitan Municipality v Gauteng Development Tribunal 2010 6 SA 182 (CC).

This view appears to be shared by the IUCN considering its emphasis on subsidiarity in relation to improved 'nested' environmental governance in the IUCN Position Paper n 1 above.

Oe Buréa n 38 above at 218 states that the principle of subsidiarity is 'a cloudy and ambiguous concept which is readily open to instrumental use. The principle is politically complex and legally uncertain.'

⁶² 'The new Europe: from spectator to participant—does the European Community interfere too much?' Speech by Sir Leon Brittan to the Conservative Group for Europe (Bournemouth, 11 October 1990).

A number of descriptions of the principle of subsidiarity exists. The common understanding is that it functions as a device for distinguishing between 'central or federal' and 'state or lower level government' power and competencies – that is, for the assignment of subject matter areas to respective government spheres and as a means to avoid excessive centralisation of governing power (Craig 'Subsidiarity: a political and legal analysis' (2012) 50/S1 *Journal of Common Market Studies*) 73). The EU is known, for example, for having adopted a subsidiarity governance model for the post-Cold War era in which lower levels of government in the EU system (state governments and other subnational authorities) are not denied their competencies as long as they are able to carry out specific tasks assigned to them. See Knight n 13 above at 32.

Notably, there are scant academic sources that specifically and comprehensively analyse the principle of subsidiarity in the normative sense. Existing materials on the principle in most instances focus on the application of subsidiarity and the principle of subsidiarity in specific governance systems, for example, the EU and the United States of America (USA).

⁶⁵ See Katcherian 'Unraveling the paradox: competence and the failure of subsidiarity in the European Union' (2012) 35/2 *Political and Legal Anthropology Review* 272.

In the German context subsidiarity is the guiding principle of federalism. See its nuanced functioning in terms of art 72–74 of the *Grundgesetz* (Basic Law of the Federal Republic of Germany) (1949) and further Teasdale 'Subsidiarity in post-Maastricht Europe' (1993) 64/2 The Political Quarterly 187; Endo The principle of subsidiarity: from Johannes Althusius to Jacques Delors 6.639, 6.613–6.612.

Ken Endo indicates that relatively older reference materials deal only with the sociophilosophical or legal aspects of subsidiarity while more recent literature nearly exclusively focus attention on EU matters. 'There is very little research to bridge this gap.' Endo n 66 above at 6.648, 6.644. On the evolution of the principle of subsidiarity in the EU see Endo n 66 above at 6.609–6.569.

as politically complex and legally uncertain.⁶⁸ This may be ascribed to its well-documented yet disparate historical evolution.⁶⁹

The principle of subsidiarity applies in fields such as political science, management, and government. It is an organising principle of decentralisation which provides that a matter ought to be handled by the smallest, lowest, or least centralised authority capable of addressing the matter effectively. In governance and politics, the principle ties in with the institutional design of governments and the notions of federalism, pluralism, and joint responsibility. It suggests that a central authority should have a subsidiarity function vis-a-vis lower level authorities, and should perform only those tasks which cannot be performed effectively at a more immediate or local level. In the principle of substitution vis-a-vis lower level authorities, and should perform only those tasks which cannot be performed effectively at a more immediate or local level.

Subsidiarity in this context, has both a negative and a positive dimension.⁷² The negative dimension refers to the limitation of competences of 'higher' or more authoritative organisations in relation to 'lower' entities with seemingly less authority.⁷³ The positive dimension refers to the possibility or duty of more authoritative organisations to intervene in entities with less authority.⁷⁴ These two dimensions are well captured by Delors when he states:⁷⁵

Subsidiarity is not simply a limit to intervention by a higher authority *vis-à-vis* a person or a community in a position to act itself, it is also an obligation

De Burća n 38 above at 218.

⁶⁹ One of the most comprehensive discussions of the historical development of the principle of subsidiarity is to be found in Endo n 66 above at 6.650–6.554.

See Vischer 'Subsidiarity as a principle of governance: beyond devolution' (2001) 35 *Indiana LR* 103; Follesdal 'Subsidiarity, democracy, and human rights in the Constitutional Treaty of Europe' (2006) 37/1 *Journal of Social Philosophy* 64, for example.

⁷¹ *Ibid*, for example.

See the explanation by Endo n 66 above at 6.642–6.641.

Viewed in the negative sense, organisations with more power: may not intervene if entities with less authority can satisfactorily accomplish its aims; should not intervene if 'lower' entities can accomplish its aims on its own; and cannot intervene if not assigned to do so.

Viewed in the positive sense organisations with more power: can intervene to the extent that authorities with less authority cannot satisfactorily accomplish its aims; should intervene if authorities with less authority cannot accomplish its aims on its own; and can/must intervene when assigned to do so.

Delors 'Principle of subsidiarity: contribution to the debate' in Delors *et al* (eds) *Subsidiarity: the challenge of change* (1991) 9 as quoted by Endo n 66 above at 6.640.

for this authority to act $vis-\hat{a}-vis$ this person or this group to see that it is given the means to achieve its ends.

A further distinction is drawn between the territorial and the non-territorial application of subsidiarity. In a non-territorial sense subsidiarity, for example, refers to the delimitation of authority between the private and public spheres (for example, in the Catholic doctrine as explained below). In the territorial sense, subsidiarity, for example, refers to the division of authority between territorially distinguished spheres or levels of government in federal government structures such as the levels of government discernible in the EU and the United States of America (USA).

Considering international, regional, and national government constructs and relationships, the principle of subsidiarity is 'double-edged'⁷⁷ and has a 'boomerang' effect.⁷⁸ It typically applies to national state governments in relation to supra-national governing bodies such as the UN, the EU, the African Union, and the Southern African Development Community. At the same time it also applies to the relationship between those very same national governments *vis-à-vis* their provincial, sub-state, and local authorities. In a similar way, the principle also reverts to the relationship between local authorities and local communities or societies.

The descriptions above are underpinned by a number of functional features of the principle of subsidiarity.⁷⁹ To be able to apply the principle to

⁷⁶ Endo n 66 above at 6.640–6.6.38.

⁷⁷ *Id* at 6.565.

⁷⁸ *Id* at 6.566.

From the historic and contemporary descriptions thereof, the key functional features of the principle of subsidiarity are the following: it concerns the spread, devolution and delegation of governing power (Katcherian n 65 above at 272; De Burća n 38 above at 218) while in the spread of governing power it is a way of enhancing pluralism and the diversity of international or global, national and local values, interests and concerns; it holds that authority is exercised at the lowest practical level within a political system with a constitutional design (Teasdale n 66 above at 187); it involves the determination of who (that is, which governance actor(s)) can legitimately address what public problem for whom and how (Anheier n 3 above at 16 who refers in this regard to the work of Kooiman and Jentoft) on the basis of practical and comparative efficiency (De Burća 38 above at 218); it is an essential component of how different actors interact at different levels of decision-making in a broader selection of law and policy arenas (Badenoch Transboundary environmental governance: principles and practice in mainland Southeast Asia - Report of the World Resources Institute (2002) 11); and it connects and explains the nexus between supra government and the small government structure closest to the substance or objects of an issue. Its functioning is further implied by criteria to regulate the allocation or the use of authority within a political order that is bound by the

governance relationships in the new global context, the origin, conceptual evolution, theory and reasoning behind the notion of subsidiarity⁸⁰ *per se* are significant.

In one of the most detailed studies of the subject, the notion of subsidiarity is traced back to Aristotle and Thomas Aquinas resulting in the conclusion that the notion is a typical product of European political culture. ⁸¹ While the literature often identifies the encyclicals of the Popes of the Catholic Church as the birth of the principle of subsidiarity, ⁸² the first proponent of subsidiarity is recorded to have been Althusius, a Calvinist theoretician of the secular state at the beginning of the 17th century. Althusius was part of the 'stormy movement' of the Counter-Reformation and tried to maintain in his work the relative autonomy of his city *vis-à-vis* its Lutheran provincial Lord and Catholic Emperor. ⁸³ He reasoned, *inter alia*, that 'men need the

rule of law (Howse & Nicolaidis 'Enhancing WTO legitimacy: constitutionalization or global subsidiarity' (2003) 16/1 *Governance: an International Journal of Policy, Administration and Institutions* 73, but where there is no unitary sovereign (Kolers n 5 above at 661; Follesdal n 70 above at 61). These criteria fall somewhere on a continuum between the procedural (institutional effectiveness *etcetera*) and substantive (questions on who is significantly and legitimately affected by the allocation of authority).

Also referred to in the literature as 'subsidium', 'subsidiaritë', 'Subsidiarität'. The word subsidium in Latin means 'something in reserve', 'support' and 'auxiliary forces'. See Endo n 66 above at 6.644 632.

The original study was conducted by Millon-Delsol (*Le principe de subsidiarité* (1990) and *L'État subsidiaire* (1992)) but is re-presented in Endo n 66 above at 6.646.

See for example Endo n 66 above at 6.632, 6.628-6.6.23 and Vischer n 70 above at 108–116. It is reported in the work of Endo that in May 1891, Pope Leo XIII issued an encyclical 'Rerum Novarum' to all the Bishops which have become a monumental landmark in the official teachings of the Catholic Church regarding social problems. The 'Rerum Novarum' cleared the way for the State to protect workers with the permission of the Church. The Church thus officially allowed the State to intervene in the social context where the Church had initially found itself to be the main actor. It was however only in 1931 when the principle of subsidiarity was for the first time officially formulated in an address of Pope Pius XI entitled 'Quadragesemo Anno'. In this address it was stated that ... '(j)ust as it is gravely wrong to take from individuals what they can accomplish on their own initiative and industry and give it to the community, so it is an injustice and at the same time a great evil and disturbance of right order to assign to a greater and higher association what lesser and subordinate organizations can do'. With this statement the Church emphasised the restriction of the interference of more authoritative organisations (for example, the State) rather than to emphasise the duties of such organisations. From Pope Pius XI's conviction at the time, it was however also clear that more authoritative organisations had to 'revive their efficiency and strength' through the 'easing of its burdens': '... for, with the structure of social governance lost, and with the taking over of all the burdens which the wrecked associations once bore, the state has been overwhelmed and crushed by almost infinite tasks and duties'.

See the account by Endo n 66 above at 6.631–6.6.30.

assistance or aid of others' and that seeking symbiosis among social associations such as cities and national or federal authorities 'is the essential subjective matter of politics'. Many decades later Pope Pius XI further delineated the sphere of the intervention of more authoritative organisations – such as the state – in the state-church-society construct. In the first explicit announcement on the principle of subsidiarity in favour of society and the church, he reasoned that organisations with power, such as the state, are enabled through subsidiarity to 'more freely, powerfully, and effectively do all those things that belong to it alone'. St

Building on the above, Vischer argues that subsidiarity is not a 'knee-jerk shunning' of higher-level government authority; nor does it stand for blanket devolution of government functions from higher level government to lower authorities. It is, instead, a principled tendency 'toward solving problems' at the local level and empowering local authorities to act more efficiently. In similar vein, Calame states that subsidiarity entails that it is at the 'lowest level' that we must find concrete ways of implementing law and policy and that subsidiarity stresses creativity, responsibility, and specific factors on a local scale. It is about sharing competence and also learning how to develop cooperation between governing actors having different types and degrees of governing power. From these views, implicit emphasis on trust and compromise between governance actors may be discerned.

The assumption underpinning subsidiarity is, therefore, that no single type of governance actor or level of organisation is alone appropriate for all functions of governing. 90 Governing authority and functions must be spread

⁸⁴ Id at 6.629. Locke during the same time also shared some views in relation to subsidiarity but with a stronger emphasis on the relationship between society and government. Views of the same kind further appear in the works of Montesquieu of W Von Humboldt as well as statements by A Lincoln and JS Mills. See Endo n 66 above at 6.629–6.628.

⁸⁵ See Endo n 66 above at 6.622.

Vischer n 70 above at 116.

⁸⁷ Id at 116

⁸⁸ Calame *Revolutionizing governance and reforming European governance* (2002) 2 available at: http://graspe.eu/bip2523.pdf (last accessed 5 July 2015).

⁸⁹ Ibid

See also Karlsson-Vinkhuyzen, Jollands & Staudt Ecological economics 83 (2012) 11–18. The IUCN Position Paper n 1 above further states as follows: 'IUCN emphasizes the need to empower and strengthen local governance systems, as they are closer to the ecosystems and the livelihoods of the people who depend on them. Global, regional and national structures need to apply a bottom-up approach and respond to local needs. In line with the principle of subsidiarity, international governance structures can and should play a vital role in empowering local decisions on sustainable development since they are

across the actors involved through 'intervention' – as it is referred to in the literature. The guiding criteria proposed for the intervention or lack of intervention by governing institutions with greater authority are: the 'better attainment' criterion; the effectiveness criterion; the efficiency criterion; the cross-boundary dimension or effects criterion, and the necessity criterion. ⁹²

Subsidiarity and local government in GEG and TEL

What we have seen above confirms that global and transnational environmental problems cannot be solved through the efforts of any one city, one municipality, one country, or one region alone. This lends credibility to the intervention or involvement of actors with greater authority in the governing function of actors with less authority. Yet, who has more authority in the new global context and why? Who must support whom and in what ways? An hierarchical division of governance authority militates against the very nature of GEG and TEL as explained earlier. Therefore, because of its design for layered constitutional governance systems, the principle of subsidiarity cannot justifiably be transplanted to, or even be applied by analogy to, the fluid 'constitution-free' new global governance context. The meaning of the principle of subsidiarity in the narrow sense is therefore of limited practical use in the GEG and TEL context.

Arguably, it is subsidiarity thinking *per se* that informs the debate on the effective resolution of governance-related challenges facing GEG and TEL. Subsidiarity provides that substantive GEG and TEL problems (*eg*, in relation to water resource protection, local carbon development, or waste management) that can best be addressed or resolved in the sub-national or local governance spheres, must be dealt with at that level. In other words, other actors must not 'intervene' in such problems. Subsidiarity does not, however, suggest that other actors abstain from the provision of support or

part of an international network of governance levels. At the national level, central governments must empower local governance structures including through the provision of adequate financial and human resources, and by allowing for their meaningful involvement in decision-making processes.'

Intervention is understood to refer to the taking part in something as to prevent or alter a result or course of events or to an interruption of something. For present purposes intervention must be understood to denote the involvement of governance actors with more governing power in the governing function of governance actors with less governing power.

⁹² See Endo n 66 above at 6.635.

[&]quot;Constitution" in this sense implies a formal codified set of fundamental principles or established precedents according to which the body of GEG and TEL actors is acknowledged to be governed and from which they derive their own governing authority.

input. On the contrary, it suggests that in the design, development, and implementation of GEG and TEL, the ability to act and the problem-solving potential of local authorities must be deliberately unleashed and harnessed. There is a notable emphasis on cooperation and support between governance actors. But how to unleash the ability and potential of local authorities or actors (spread across continents, countries, and sub-national administrative borders, and embedded in hundreds of very diverse national and sub-national legal systems) in a consistent and coherent way?

Considering the number of externalities and complexities involved in the question of how to define and understand the role of (global) cities and smaller local authorities in GEG and TEL more clearly, a clear-cut solution or answer appears unlikely. The section below exemplifies what subsidiarity suggests in this regard, by using the renewable energy law and governance context as a more focused frame of reference. This sector of GEG is useful because of its rising importance world-wide, and because it marks one of a few relatively new GEG areas where design and implementation mistakes that seem to have been made in other sectors in the past (eg, prevention of uncontrollable deforestation and the protection of certain natural terrestrial and marine habitats), can be anticipated and addressed early on.

GLOBAL RENEWABLE ENERGY LAW AND GOVERNANCE AND THE 'MERTON RULE'-EFFECT

The rise of global energy law and governance

Global energy governance (GEnG) increasingly features as a topic of scholarly and political analysis. Reminiscent of the features of GEG, GEnG can be described as the collection of and interaction between national, transboundary, and international energy-related instruments, role-players, institutions, networks, policy developments, processes, and other related initiatives. GEnG is shaped by a number of major trends such as, but not limited to, market trends, that is, rapidly changing framework conditions driven by the rise of major new consumers such as China and India; the growing role of state players in the oil and gas markets; emerging regional and global climate mitigation regimes; and increased diversity in the

Terterov 'Testing the water for global energy governance reform: can the Energy Charter provide a new benchmark' *Occasional Paper of the Energy Charter Secretariat Knowledge Centre* (2013) 4.

Goldthau & Witte 'The role of rules and institutions in global energy: an introduction' in Goldthau & Witte Global energy governance – The new rules of the game (2010) 2.

energy mix of developed and developing countries. Within the GEnG context there is also a strong interrelationship between law and technology. From an environmental perspective, GEnG further holds clear implications for environmental resource protection which renders GEnG fit to be described as a specialised sector in the new global context. From the section of th

Stark resemblances exist between the diffused make-up of and challenges facing GEG, TEL and GEnG. Terterov explains that

the manner in which inter-governmental actors engaged in global energy governance has evolved during the past decades has lent itself more to the creation of a landscape full of 'governors' – with highly diverse policy objectives – rather than any form of international energy order, or 'governance.⁹⁸

The GEnG actors have also in the main emerged as being somehow dependent on each other, either as a result of economic forces or for purposes of addressing problems without borders, and often in response to one form of crisis or another.⁹⁹

As regards international energy law, it has been said that a 'rather meagre collection of normative text' has been adopted with respect to norms and activities with trans-boundary applications. ¹⁰⁰ Karlsson-Vinkhuyzen *et al* explain that the existing legal framework is vague and lacks implementation plans and division of responsibility while 'considerable but fruitless efforts' were made at Rio+20 in 2012, to adopt targets related to energy efficiency, renewable energy, and access to energy. ¹⁰¹ As the international framework convention, the UNFCCC¹⁰² mandates few detailed obligations for state

But, as Bradbrook put it ten years ago, '(t)echnological issues are always difficult to reduce to laws. Such laws require a thorough understanding by the law-makers of the appropriate technology, which has not yet occurred in the field of energy.' Bradbrook 'Environmental aspects of energy law: the role of the law' (1994) 5 Renewable Energy 1279.

⁹⁷ GEnG may also be regarded as a sector of other areas of global governance, trade, investment, climate change and offshore exploration.

Terterov n 94 above at 5.

Id at 6. See also Bruce 'International law and renewable energy: facilitating sustainable energy for all?' (2013) 4 Melbourne Journal of International Law 10.

See Karlsson-Vinkhuyzen, Jollands & Staudt n 90 above at 14–15.

¹⁰¹ Ibid.

UN Framework Convention on Climate Change (UNFCCC) (1992).

parties, and even fewer related specifcally to energy.¹⁰³ The closest is the rather vaguely worded obligation to 'promote and cooperate in the development of, application and diffusion' of technologies that 'control, prevent or reduce' emissions in sectors, including the energy sector.¹⁰⁴ The Kyoto Protocol to the UNFCCC¹⁰⁵ prescribes legally-binding quantified emission-limitation or reduction commitments – albeit still only for state parties listed in Annex B.¹⁰⁶ As in many other areas, national sovereignty complicates the implementation and enforcement of the developing international energy law framework. In fact, sovereignty has been described as a 'major obstacle in current efforts towards strengthening global energy governance'.¹⁰⁷

Cumulatively, what we have seen above appears to be fuelling arguments which favour a strengthened understanding of GEnG and the accompanying legal framework. There are, however, specific sectors of GEnG that remain in need of development. Renewable energy, one of the sectors covered by GEnG, is said to provide approximately eighteen per cent of the world's energy. Renewable energy is, however, a very complex issue in that it operates in direct competition to fossil fuels in which many countries have a substantial interest. Periods of high oil prices and climate-change mitigation obligations have, for example, triggered the substantial political interest in trans-boundary renewable energy cooperation in recent years.

Renewable energy governance and law, as well as GEnG more generally, are in a process of rapid evolution. Legally, relevant action is currently being taken at the regional and international levels, and further developments are anticipated. Based on the jargon of the 2009 European Community (EC) Directive on the Promotion of the Use of Energy from Renewable Sources,

This is a prominent feature of all framework agreements. See Bruce n 99 above at 18.

¹⁰⁴ Id at 19.

¹⁰⁵ Kyoto Protocol to the UNFCCC (1997).

Articles 2(1), 3(1) and Annex B of the Kyoto Protocol.

Karlsson-Vinkhuyzen, Jollands & Staudt n 90 above at 13.

See Karlsson-Vinkhuyzen, Jollands & Staudt n 90 above at 11–12. Florini & Sovacool n 25 above at 5239–5240 support this overall message and *inter alia* state that energy is 'governed piecemeal, mostly in ad-hoc responses involving specific countries or groups of countries and any of a wide number of non-governmental actors' and that this has created 'an incoherent policy landscape littered with uncoordinated efforts'.

With the typical sources being bio-energy, geothermal energy, hydropower, photovoltaics, solar thermal, solar thermal electricity, wind energy and ocean energy.

Karlsson-Vinkhuyzen, Jollands & Staudt n 90 above at 16.

¹¹¹ *Ibid*.

for example, it is to be expected that, in general, the role of different actors in GEnG will increasingly come under the spotlight. This includes the existing and future role that local governments may play. The UK's Merton Rule and its subsequent effects serve as an isolated yet revealing and fascinating example of how GEG actors and the actors involved in TEL-making (especially at the international level) may optimally use the innovative thinking and developments happening at the very local level of state governments. While the Merton Rule serves as an example primarily in the GEnG context, the underlying message applies by analogy to the role of cities and other local authorities in GEG in the broad sense.

The 'Merton Rule'-effect

The UK serves as an example of a country which is nestled between a number of international and regional energy-law obligations. The structure and function of the UK government (including the design of local government) are further replicated in several parts of the world as a result of colonisation and the fact that the UK was once perceived as an 'empire on which the sun never sets'. For present purposes local governance in the UK offers an example with which various decision-makers and scholars will be able to identify. The UK's Local Government Act, 2000, provides in section 2(1) that 'every local authority is to have the power to do anything that they consider likely to achieve the promotion or improvement of the environmental well-being of their [its] area'. 113 This forms the basis of the decentralisation of environmental powers in the UK generally. In recent years, the UK government has initiated a framework for a more localised system of energy governance, and (somewhat progressively) adopted a Climate Change Act in 2008 – all of which form part of a 'new energy paradigm' in the country. 114 Its latest energy White Paper – the Local Carbon Transition Plan 2009, – states that one of the principal challenges facing the UK is the transformation of a centralised system of energy generation into a more flexible 'decentralised' design with concomitant implications for

Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the Promotion of the Use of Energy from Renewable Sources.

The UK government further wants to 'provide local authorities and partners with the flexibility and capacity to deliver the best solutions for their areas through a reformed relationship between central and local government'. See Fudge et al Locating the agency and influence of local authorities in UK energy governance – University of Surrey Centre for Environmental Strategy Working Paper 01/12 (2012) 28.

¹¹⁴ Id at 3, 8. In terms of the Climate Change Act (section 1), the UK must reduce its levels of pollution by 80 per cent by 2050.

community-level energy initiatives.¹¹⁵ In similar vein, and resembling subsidiarity thinking, the role of local authorities as a 'vanguard' of local and community action on climate change, is noted 33 times in the Plan. It is clear that the national government wishes local authorities to 'coordinate, tailor and drive the development of a low carbon economy in their areas'.¹¹⁶

The Merton Rule has, however, shown that innovative thinking behind a local government law and policy may, in fact, transcend the limits of local application. In 2003, the Merton London Borough Council adopted a local planning policy which requires a proportion of the energy demand of a new development to be met from on-site renewable energy-generation technologies. This Borough, famously known as the home of Wimbledon, was the first local authority to have translated and formalised renewable energy targets in the UK. What has come to be called the 'Merton Rule' is today described as a ground-breaking planning policy, was first pioneered by a relatively small local government authority.

The Merton Rule is a prescriptive local-planning policy and applies to all buildings (not only residential developments) and requires new developments to generate at least ten per cent of their energy needs from onsite renewable energy equipment. The Merton Council initially worked closely with other authorities, professions, and industries to embed the Merton Rule, which resulted in a significant reduction in CO₂ emissions. Following the success of the Merton Rule in Merton, over 325 of the 390 UK local authorities are reported to have adopted Merton-like local prorenewable planning policies. In 2008, before the legal developments at EC level, the UK government published its national planning guidance which, based on the Merton example, made it compulsory for all UK local authorities to adopt a Merton-like policy. By now, the Merton Rule has

Fudge *et al* n 113 above at 9.

See for example par 2.43 of the Government of the United Kingdom Department of Energy and Climate Change *Carbon Plan: delivering our low carbon future* (2013) available at: https://www.gov.uk/government/publications/the-carbon-plan-reducing-greenhouse-gas-emissions--2 (last accessed 5 July 2015); Fudge *et al* n 113 above at 15.

At the time, the legal power for local authorities to develop such policies was uncertain and still had to be tested (see Fudge *et al* n 113 above at 24). It was also another six years before the EC would adopt its Directive on Renewable Energy and that the UK national government would adopt its Low Carbon Transition Plan as discussed above.

For a step-by-step explanation of how the policy is applied, see Merton Council *The Merton Rule: how the Policy is applied* (2015) available at:

http://www.merton.gov.uk/environment/planning/planningpolicy/mertonrule/how is the policy applied.htm (last accessed 5 July 2015).

permeated planning permission for all new major development projects throughout the UK.¹¹⁹

The Merton Rule-initiative and development, the brainchild, as we have seen, of a relatively small local authority, has had a marked impact on renewable-energy law and policy developments in the UK in recent years. As explained above, in addition to the effect it had in other UK local authorities, the Merton Rule has over time become part of the country's national planning guidance that eventually led to the national Zero Carbon Buildings policy (2012). This policy requires that from 2016, all new homes must mitigate, through various measures, all the carbon emissions produced on-site as a result of regulated energy use.

The Merton Rule has also had a spill-over effect in the private sector. For example, Mitsubishi Electrical developed a new range of heating and ventilation equipment to meet the Merton Rule requirements. While no transnational spill-over effects have been recorded *per se*, the potential impact should not be ruled out as the London Borough of Merton is a sister city of Irving, Texas in the USA, and Irving has additional sister cities in Finland, France, Italy, Mexico, and Mongolia. The development may also as a 'best practice'-example, influence programme development in local government organisations to which the London Borough of Merton belongs.

It must, however, be noted that some have criticised the Merton Rule *inter alia* for its focus on the introduction of a renewable energy requirement *vis-à-vis* lower energy consumption; the investment costs on the part of the developer *vis-à-vis* the revenue benefit of lower annual running costs of occupiers of buildings after completion; the assumption that in all cases, renewable energy generation represents the most effective method of reducing CO₂ emissions at any given location; and the difficulty of tracing and measuring compliance with the rule. Initially, concerns were also raised about the legality of the Merton Rule and whether or not the passing of this policy fitted local government authority. This has, however, been confirmed by the UK's Planning Policy Statement 22. Government of the United Kingdom Department for Communities and Local Government *Improving the energy efficiency of buildings and using planning to protect the environment policy* (2012) available at:

https://www.gov.uk/government/policies/improving-the-energy-efficiency-of-buildings-and-using-planning-to-protect-the-environment (last accessed 5 July 2015).

See Sister Cities International 2014 Membership Directory (2014) available at: https://user-2221582232.publ.com/Sister-Cities-International-2014-Membership-Directory#38/z (last accessed 5 July 2015). For insightful research on sister-city type partnerships between local authorities in the environmental context, see McLarty et al 'Sisters in sustainability: municipal partnerships for social, environmental, and economic growth' (2014) Sustainable Science.

UNLEASHING THE ABILITY AND POTENTIAL OF LOCAL GOVERNMENTS

All over the world local governments exert influence on and wield power over local communities. A global 'one-size-fits-all' approach to anything centring on local government in the collective, is rendered impossible by the highly diverse legal status, powers, objectives, structures, resources, and different types of strength and challenges facing local governments. Legal Kolers describes this as 'formal diversity' in local government of diversity that understandably compromises any proposal for a clearly delineated role for local governments in GEG and TEL. It is argued, however, that based on what can be gleaned from subsidiarity thinking and the lessons to be learned from the Merton Rule-effect, it is possible to conjure up a conceptual framework which will better inform an understanding of the material role that local governments can play in pursuit of global environmental objectives and in resolving global environmental problems.

While not saying much about the parameters of local 'action', subsidiarity thinking and the Merton effect suggest that in terms of the role of local government in the global arena, a theoretically sound and politically and fiscally-attuned framework of understanding is necessary. This framework must be: a) flexible enough to accommodate formal local government diversity in a global context; b) sufficiently structured to ensure the more or less consistent devolution of critical implementation functions, powers, and other abilities to all local types of authority; and c) leverage bottom-up and top-down flows of innovation, capacity, and representation.

Given the range of legal, governance, and political complexities involved, it is impossible for any research article of limited scope to devise the details of the ultimate conceptual framework. In my remaining analysis I attempt, at best, to advance three observations on the basis of what has been discussed so far: a) the notion of 'think global, *act local*' is inherently challenged; b) the individual and joint potential and capacity of cities *and* other types of local governments must be unlocked through *consistent* interactor support; and c) the role of local governments in GEG and TEL does not point in one direction only.

See, for example, UN Department of Social and Economic Affairs n 2 above at 75.

Kolers n 5 above at 663.

The notion of 'think global, act local' – inherently challenged

Discourse surrounding GEG and TEL supports the notion of local implementation of international ideals. Betsill and Bulkeley, for example, remark that 124

global environmental governance is implicitly conceptualised as a 'cascade', in which agreements forged by nation-states at the international level are passed down to be *implemented* through domestic processes within those states ... (own emphasis.)

In the pursuit of globally shared environmental objectives like sustainable development, waste minimisation, and CO₂ reduction, the adage 'think global, act local' often surfaces. It clearly complements subsidiarity thinking and is likely to be at the basis of the increased international law concern with the domestic legal status of cities. Still, the devil is in the detail of the 'acting' to be done 'locally' – these details are neither self-evident nor easy to define when one considers the varying degrees of legislative, executive, and at times also judicial authority that local governments have, as well as the difficulty with any form of what Sand calls the 'bypassing of traditional parliamentary controls'. 126

The notion of 'think global, act local' raises several important practical questions. Firstly, is local government action limited to local planning, policy, and programme development aligned with global ideas and supported and nurtured by regional and/or national governments? Secondly, where does local government legislative authority fit in those countries where local authorities have very strong law-making and concomitant enforcement powers? Thirdly, where does the function of the local authority as the 'governor' and its function as being 'governed' by higher-level environmental laws and policies legitimately and fairly, begin and end? Lastly, in which area of global environmental concern is local implementation most feasible and how is this best to be determined?

Subsidiarity thinking assists to some degree in answering certain of these questions. It suggests, for example, that implementation of clearly defined and executable GEG and TEL objectives must be left to local governments

Betsill & Bulkeley n 25 above at 473.

¹²⁵ Zimmermann n 40 above at 154 adapts the adage for the GEG context and refers to 'act locally and argue globally'.

See Sand n 1 above at 244 and further, Bulkeley et al n 2 above at 962.

unless these authorities are not up for the task. Held provides guidance in this regard by describing four nested levels of governance: local, national, regional, and global or international governance. The author explains that three tests apply when determining at what level an issue or sub-issue should be resolved or governed. These tests relate to the extent of the issue (referring to the range of people and resources affected); the intensity of the issue (referring to the degree of impingement and the level of the impact); and the comparative efficacy (asking whether an issue cannot be better resolved locally). The latter test involves benefiting from scales efficiency and the pooling of resources and expertise through the use of the efficacy criteria. 129

In his discussion of 'subsidiarity-led thinking', De Sadeleer identifies vertical and horizontal dimensions of subsidiarity – where the vertical denotes the question as to *who* the appropriate decision-maker or action taker is, while the horizontal asks *what* the appropriate instrument would be, for example, framework instruments *vis-à-vis* more detailed instruments. ¹³⁰ On the basis of 'global subsidiarity' in the World Trade Organisation (WTO) set-up, Howse and Nicolaidis extend this thinking by asking: how far should global rules (for example, TEL rules) intrude inside state borders. ¹³¹

The notion of 'local action' should be accompanied by emphasis on the concomitant devolution of financial resources, capacity, and accountability more generally. The accountability question is particularly complex and subsidiarity does not offer any obvious direction in this regard.¹³² The idea of 'think global, act local' is in the final instance also suggestive of a one-way flow from the development of an idea, plan, strategy, law, or policy in the global sphere, to next-step action in the local sphere. This perception limits the opportunity for a Merton-type two-way flow of initiative between the two spheres.

Kolers n 5 above at 665 with reference to David Held 665. Anheier n 3 above at 26 further refers to governance as 'a system of related, nested parts whose interdependence in political, legal and economic terms implies shared scope of autonomy and responsibility'.

See Kolers n 5 above at 665 with reference to David Held 665.

¹²⁹ Karlsson-Vinkhuyzen, Jollands & Staudt n 90 above at 17.

De Sadeleer 'Principle of subsidiarity and the EU Environmental Policy' (2012) 9 *Journal for European Environmental and Planning Law* 66.

Howse & Nicolaidis n 79 above at 73.

Holley gives some attention to accountability in Holley n 4 above at 127–211.

Joint and individual capacity and consistent support

Arguably, the most understated side of subsidiarity thinking is the notion's emphasis on inter-actor support and cooperation in governance systems. The fluidity of GEG and TEL emphasises the fact that inter-actor support can typically not be limited to national and other sub-national governance actors, but must be rendered by all actors – including those that exist and operate outside of state government structures. Howse and Nicolaidis, for example, argue that the global community must assume some of the responsibilities to help states to fulfil the functions that original 'international bargains' were intended to protect. 133 The authors reason that globalisation challenges states to recast or redesign 'the local' to meet new pressures and opportunities that come with globalisation.¹³⁴ When, for example, 'the world' envisages obligations with financial and institutional consequences, it must support the efforts of states as well as *sub-state local actors* to adjust to those obligations. 135 In the words of Kolers, this is essentially about executing a sense of 'mutual obligation'. 136 While there is significant interactor, ad hoc and programme-based support for some local authorities across the world, 137 it may not fully satisfy the need for consistent support and cooperation suggested by subsidiarity-thinking.

Subsidiarity thinking emphasises that an auxiliary relationship should exist between local governments and GEG and TEL actors with more relative governing powers. It follows that the strength of the role of local governments depends largely on collateral support and cooperation between public and private, international and regional, as well as national and other sub-national governance actors. However, given the formal local government diversity referred to earlier, the questions remains: how must such support and cooperation be organised? While highly relevant, it is impossible in this article to come up with any conclusive answer.

Howse & Nicolaidis n 79 above at 89.

¹³⁴ *Id* at 89.

¹³⁵ *Id* at 90.

Kolers n 5 above at 666.

There are innumerable such support programmes that involve non-governmental organisations, international aid institutions, national governments, the EU, political institutions and various international and regional local government organisations. These programmes tend to be focused on local government training, the design and adoption of improved governance instrumentation, for example, local plans, management systems and budgets as well as local infrastructure development.

Further, on the basis of the broad scope of the objectives of TEL and GEG, as well as the Merton Rule effect, it is observed with respect to the required conceptual framework that: a) the role of *all* manifestations of local government – for example mega-cities, cities, towns, counties, districts, rural, and other kinds of local authorities – warrants attention, and b) a distinction should be made between local governments as collectively represented by national and international local government organisations, and local governments as individual actors, that is, as separate governing actors with autonomous, yet limited governing powers within national government systems. Given the 'global-ness' of GEG and TEL, do particulars like these matter?

From a local government and domestic constitutional law perspective it is proposed that yes, they do. Some of the most severe environmental problems of our time such as deforestation, drought, flooding, and contamination of water destined for agricultural use occur in rural areas - areas which typically fall outside the demarcated governance areas of 'cities' or bigger urban local governments. It is also smaller local governments which often oversee, in cooperation with regional authorities, some of the areas which are particularly suitable for alternative and modern technology-based energy exploration or which face natural resource exploitation and the degradation of local land in the search for local economic development. Some of the biggest environmental governance challenges can also be traced back to incountry difficulties with the division of environmental powers and functions such as environmental health, water management, biodiversity protection, and hazardous substances control, among and between different local and other national and sub-national authorities. All good global intentions fall flat when, for example, in the in-country (domestic) context there is fragmented and uncooperative governance or turf wars between regional, metropolitan, district, and other local authorities. ¹³⁸ The example of Merton and recorded case studies of various other local governments of similar size, 139 have shown over the years how it is certainly not only local authorities labelled as of 'cities' that can have a positive environmental

South Africa for example has a new constitutional democracy that allocated different types of environmental authority to different spheres of government and to different local government types. This has already resulted in a range of cases before the highest courts of the country, as earlier indicated.

See for various different environmentally relevant case studies on metropolitan, mediumsized and smaller municipalities, ICLEI Case Studies (date unknown) available at: http://www.iclei.org/index.php?id=1163 (last accessed 5 July 2015) for example.

impact. It is therefore suggested that any conceptual framework for the role of local governments in the global arena take into account all local government types and sizes, and that it does not restrict its focus to larger municipalities.

Global governance must become more democratic. 140 As part of the search for a more democratic global system in the new global context, existing literature usefully considers the functions and actions of international local government organisations such as the C40 and ICLEI.¹⁴¹ Yet, the consistent application of subsidiarity thinking to, and consideration of the meaning of the Merton Rule effect for the role of local authorities in the global arena, necessitate that not only the role of intermediate and representative 'organised local government' or local government organisations be investigated. In scholarship and policy-making, attention must also be paid to the thousands of individual local governments whose interests and, especially, complexities and challenges¹⁴² are not necessarily (directly) represented by the said organisations. 143 Furthermore, while it may be easier to focus research and policy-making on the smaller group¹⁴⁴ of international representative institutions in local government matters, this is arguably not enough for optimal GEG and TEL as these institutions are not the actors that are eventually expected to 'act'. For this reason it is proposed that the role of individual local governments, together with the role of national local government organisations (for example, the South African Local Government Association, the Federation of Canadian Municipalities, the Association of Netherlands Municipalities, and the League of Cities of the Philippines) vis-à-vis the role of international local government organisations (such as ICLEI, C40 and the Council of European Municipalities and Regions) be further explored.

UN Department of Social and Economic Affairs n 2 above at 50.

See, for example, Aust n 40 above at 673–704.

These complexities and challenges may range from environmental and financial problems and deteriorating service-delivery infrastructure to problems with political buy-in, corruption, retaining skilled staff, capacity constraints and uncontrolled urban sprawl. See Pasquini & Shearing n 40 above at 3–4. Sassen n 27 above at 255 further marks local government 'logistics and systems' as complexities that are relevant in the GEG context.

¹⁴³ Zimmermann n 40 above at 159 states that 'of the million or so local governments worldwide, only a few thousand are engaged actively in international sustainability projects and networking'.

It must, however, be noted that a significant number of international local government associations exist. See Betsill & Bulkeley n 25 above at 477 who report that by 1997 there were almost thirty transnational networks of sub-national governments in Europe alone.

Role of local government does not point in only one direction

A stereotypical understanding of state sovereignty and skewed perceptions of the limitations created by the formal jurisdictional limits of local government power obscure an understanding of the role that local governments may play in the global arena. The make-up and functioning of GEG and TEL, however, render the constitutional and statutory power of local authorities in this context relative and unsettled. In fact, as this and many other studies show, it is today trite that local governments have the necessary capacity to push the envelope. 145

The Merton Rule effect confirms that some of the objectives of GEG and TEL may be achieved in part through local government initiatives or local actions originally inspired or trigged by broad, overarching international agendas such as the Johannesburg Plan of Implementation (2002). The Merton Rule exemplifies how a single local government's policy development can have a multiple impact on, for example, the area of energy governance. Even though the Merton Rule has not yet had any reported spill-over effect in other countries, the possibility remains, as renewable energy increasingly features on global, national, and local energy governance and law agendas.

Should one follow a bottom-up or a top-down approach when dealing with local government in the global arena? It is proposed that the role of local government not be perceived as pointing in only one direction — be it bottom-up or top-down. The role of local government involves a bit of both — especially given the fluidity in GEG and TEL. Yet, as will become clear below, the need remains for further research which will systematically outline the circumstances under which local authorities can best act as conduits for 'top-down' action and involvement, versus active agents for the 'bottom-up' initiative. More explicit criteria and guidance are required in this regard.

Depending on the scope of an environmental problem, devising broad strategies and plans, and developing framework-type laws and policies, may perhaps most efficiently be achieved at the global scale (that is, at 'the top' or among the governance actors with traditionally greater power) – albeit

See Zimmermann n 40 above at 155–162.

with the consistent and organised input of local governments and the international and national local government associations which together fully represent 'the bottom' (that is, local actors with traditionally less power). It is also for 'the top' to ensure that the consistent support suggested by subsidiarity thinking filters down to 'the bottom'.

Local governments must further be given the necessary governing space to use and adapt their own instrumentation for the implementation of globally-determined environmental objectives. One local government area that holds vast potential in this regard is local spatial and strategic-development planning.

On the other hand, it is necessary for locally-generated, place-based information and experience always to inform from the bottom-up, decisions and the development of frameworks at the global level and in governing structures such as the Conference of the Parties (COP) in the case of multilateral environmental agreements (MEAs). This also holds true for the initial development of global TEL instruments such as conventions and MEAs. The role of municipalities in the generation and dissemination of information and knowledge in the global context is also important as suggested by the work of, *inter alia*, Sassen¹⁴⁶ and Betsill and Bulkeley. ¹⁴⁷ At the same time, as suggested by the Merton Rule effect, structures and processes may have to be put in place better and more consistently to facilitate the bottom-up design and development of policies, programmes, plans, and laws to effect the implementation of globally-devised environmental objectives. While local government initiatives are widely acknowledged and noted, this happens, in the main, on an ad hoc basis while understanding its influence is limited to the impacts that may typically result from the sharing of the output and outcomes of local government 'case studies'. 148 As important as the local government information as to outcomes and impact is, there is equal importance in information on the internal structures and instrumentation used in a local government's decision-making and design of what only later emerges as outcomes and outputs. 149

Sassen n 40 above at 1–8.

Betsill & Bulkeley n 25 above at 478.

See Zimmermann n 40 above at 159.

Also in the case of the Merton Rule, very little is available about how the policy exactly came into being and what internal structures of the Council were involved in the process and how. Nothing further seems to be available on: the accompanying public participation process(es); the role that political buy-in has played in the success of the

CONCLUSION

In recent years and most markedly in the post-Cold War era, GEG and TEL have become valuable but complex conceptual spin-offs of the 'new' ways in which the world's resources are regulated. GEG and TEL are designed and executed in a cauldron filled with different actors with different degrees of governing authority. The ever-present strength of state autonomy and the strength of domestic constitutional law systems, are but two of the legally-relevant reasons why different GEG actors are unlikely ever to be regarded as equals in terms of governing authority, and why disparities in the duty to implement and the assumption of liability remain.

This article advanced a conceptual view of the role of local governments in GEG and TEL from the perspective of institutional subsidiarity. The role that local governments may play in the optimisation of GEG and TEL was, first of all, contemplated on the basis of what we learn from subsidiarity thinking. Perceived through the lens of subsidiarity and on the strength of the Merton Rule effect, the need was identified for a conceptual framework that: a) is flexible enough to accommodate local government diversity globally; b) is sufficiently structured to ensure a more or less consistent devolution of critical implementation functions, powers, and other abilities to all local authorities; and c) leverages both the bottom-up and top-down exchange of information, innovation, capacity building, and representation.

The further development of this framework must bear in mind that: a) the notion of 'think global, act local' is inherently challenged; b) the individual and joint potential of cities and other local governments must be unlocked through consistent inter-actor support; and c) the role of local governments does not point in one direction only. Critical for the eventual meaning and influence of the proposed framework, is its suitability for global, national, and local audiences. As necessary as an understanding of the role of local governments is for those who focus in their research and operations on the global arena, so too is an understanding among those who specialise in the construction and functioning of local government.¹⁵⁰

Merton Rule; engagement with other local or national government authorities in the design and adoption of the Rule; or the impact that the Rule has had on existing local plans, policies and laws.

This view finds support in the general statement by Sassen 'Visible formalizations and formally invisible facticities' (2013) 20/1 *Indiana Journal of Global Legal Studies* 3 that 'what may remain invisible, even though present and consequential, in one type of formalized system, can be highly present in another but be less significant'.

While more in-depth research is needed, it would appear that in the final instance a significant step to a more delineated role for local authorities in the global sphere would be to strengthen the relative positions, roles, functions, and capacity of local authorities in national environmental governance systems.¹⁵¹ Awareness and widespread acknowledgement of the role of all local authorities in the global arena can only be developed, and trust and compromise only be generally fostered, once national and other sub-national authorities begin actively to execute their legislative, executive, and judicial authority in full recognition of the fact that environmental law and governance has, in the global sense, morphed into a different 'animal' – and in this, because of their proximity and potential, local governments are likely to play, at least in principle, the role of the future lodestar.

Zimmermann n 40 above at 161–162 adopts a similar view.