

Every country can reduce future GHG emissions and protect citizens from climate change, provided it adopts the right policies. This book is to show you how.

“Innovative economic policies for climate change mitigation” is a must-read for both top-level policymakers and engaged citizens who want that their country seize all development opportunities opened up by green entrepreneurship, green jobs, new niches, and smart mitigation policies.

With more than 20 “recipes”, ranging from the most technology-oriented to the most people-centred, this book is revolutionary because:

1. it proposes out-of-the-box solutions that escape established taboos;
2. it leads the reader from the context to the implementation;
3. it shifts the classical textbook proportions of 90% analysis and 10% proposals in favour of 90% proposals and 10% analysis, relying on the intelligence of the reader to localize where the policy is suitable;
4. it relates each policy to a number of co-benefits that it generates, to synergize climate mitigation with employment, competitiveness, and happiness.

The international community of policymakers should take note of the proposals of this book - fruit of the experience of authors from developing and developed countries - to reach win-win compromises and to move forward.

*Miklós Persányi, president of UNFCCC COP9, held in Milan (2003)*

Mitigation of climate change is proceeding at a very slow pace, while new empirical results demonstrate that its pervasive consequences are appearing much faster than foreseen. Without innovative reforms of the present economic systems, there is little hope of avoiding the most catastrophic impacts of global warming. This book is therefore both important and timely.

Out of my Danish experience with planning for sustainable development in the fields of energy and environment since 1973, I recommend this book to concerned policy makers as a mandatory reading.

*Niels I. Meyer, Emeritus Professor of Physics, Technical University of Denmark*

Deep thanks for your work!

*Bill McKibben, environmentalist and co-founder of 350.org*



Second edition

ISBN 978-1-4452-8585-6



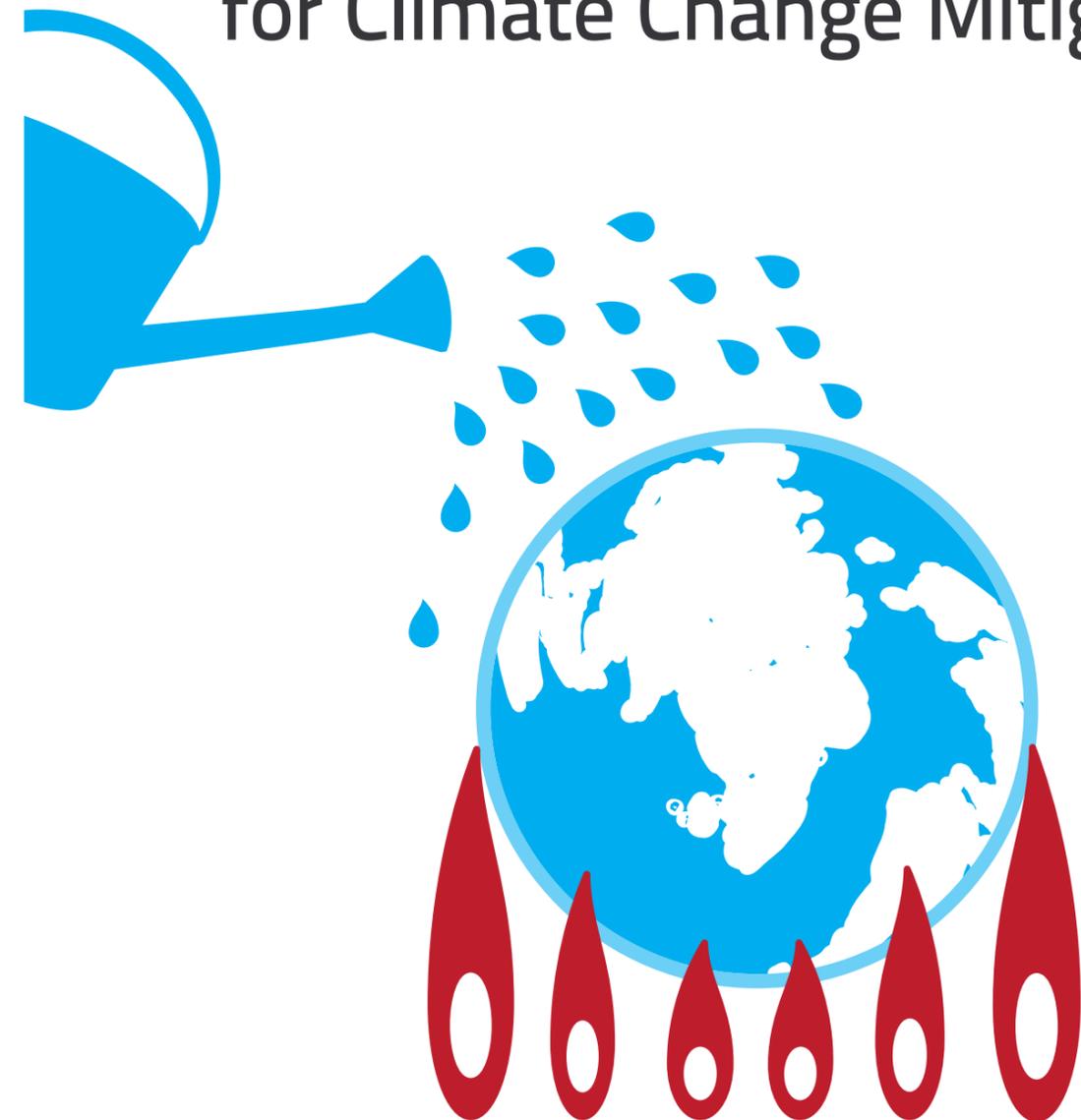
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# Innovative Economic Policies for Mitigation

## Innovative Economic Policies for Climate Change Mitigation



Valentino Piana, Shafa Aliyev, May Munch Andersen, Ilona Banaszak, Michał Beim, Bharadwaj Kannan, Bipasha Kalita, Lutchmeeduth Bullywon, Marjolein Caniels, Hina Doon, Renaud Gaucher, Joshi Gaurav, Alireza Karbasi, Yenneti Komarilani, Kua Harn Wei, Karen Hussey, Jeo Lee, Joseph Masinde, Piotr Matczak, Pathrapankal Mathew, Zahra Gafary Moghadam, Mahdie Mossannan Mozafary, Sarah Rafieirad, Henny Romijn, Vanessa Oltra, Albert Schram, Vikramaditya Singh Malik, Geoff Stewart, Zsofia Wagner, Raoul Weiler

ECONOMICS WEB INSTITUTE

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Bharadwaj Kannan,  
Bipasha Kalita, Lutchmeeduth Bullywon,  
Marjolein Caniëls, Hina Doon, Renaud Gaucher,  
Joshi Gaurav, Alireza Karbasi, Yenneti Komalirani,  
Kua Harn Wei, Karen Hussey, Jeo Lee, Joseph  
Masinde, Piotr Matczak, Pathrapankal Mathew,  
Zahra Ghafary Moghadam, Mahdie Mossannan  
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Economics Web Institute

30<sup>th</sup> October 2009 – 30<sup>th</sup> April 2012



# Table of contents

Page	Ch.	Policy identifier
11	<i>The Economics Web Institute</i>	
11	<i>Acknowledgments</i>	
11	<i>Preface to the second edition</i>	
13	EXECUTIVE SUMMARY FOR POLICY-MAKERS	
23	PRESENTATION	
	<i>Valentino Piana</i>	
27	1. THE TRANSITION TOWARDS A LOW-EMISSIONS ECONOMY: THE COEVOLUTION OF SCIENTIFIC, TECHNOLOGICAL, ECONOMICAL, SOCIAL AND POLITICAL SYSTEMS	
	<i>Valentino Piana</i>	
35	2. KEY FEATURES OF INNOVATIVE POLICIES FOR CLIMATE CHANGE MITIGATION	
41	PART I – THE POLICIES	
43	3. POLICIES FOR THE TRANSITION OF FIRMS AND SECTORS	
	<i>Maj Munch Andersen</i>	
45	3.1. Combating Climate Change through Eco-innovation - Towards the Green Innovation System	



	<i>Marjolein Caniëls and Henny Romijn</i>	
69	3.2. Strategic Niche Management as a Policy Instrument for Climate Change Mitigation	
	<i>Valentino Piana</i>	
87	3.3. Closed Long-Term Fund for Green Investments	
	<i>Kua Harn Wei</i>	
99	3.4. Corporate Sustainable-developmental Responsibility (CSdR) – A Creative Governance Approach to Change the Organizational Routines	
111	4. POLICIES FOR THE TRANSITION OF CONSUMER HABITS	
	<i>Vanessa Oltra</i>	
113	4.1. Sustainable Consumption: How Can We Boost Demand-Pull Effects?	
	<i>Valentino Piana</i>	
123	4.2. Fostering the Diffusion of Clean Technologies and Behaviors by PRODINT	
	<i>Valentino Piana</i>	
139	4.3. Assuring the Supply of Close Substitutes to Brown Products	
	<i>Zsofia Wagner</i>	
147	4.4. Eco-labels and Awards	
	<i>Valentino Piana</i>	
155	4.5. Free TV Advertising for Green Products	

	<i>Renaud Gaucher</i>	
163	4.6. Happiness Policies for Climate Change Mitigation: Some Proposals	 HAPPYPOL
173	5. POLICIES FOR THE TRANSITION IN GOVERNMENT POLICYMAKING	
	<i>Valentino Piana and Kua Harn Wei</i>	
175	5.1. Interactive Government: Leadership, Commitment, Communication and Reputation	 INTERACTGOV
	<i>Karen Hussey and Albert Schram</i>	
181	5.2. Climate Change and the Policy Integration Dividend: an Open Source Policy Dashboard to Enhance Energy, Water and Food Policy Coordination	 PCD
199	PART II – APPLICATION DOMAINS	
201	6. INTERNATIONAL AGREEMENTS	
	<i>Valentino Piana and Kua Harn Wei</i>	
203	6.1. Common but Differentiated Responsibilities: A Mosaic Strategy for Copenhagen Agreement and Beyond	 MOSAIC
	<i>Valentino Piana</i>	
217	6.2. Benchmark Clubs of Nations	 BENCHCLUB
223	7. POLICIES FOR NATIONS	
	<i>Raoul Weiler</i>	
225	7.1. Multi-Sectoral De-Growth to Save the Earth	 MUSD

- Valentino Piana*
- 233 7.2. Thematic Days
- P.M. Mathew, Bipasha Kalita,  
Bharadwaj Kannan*
- 237 7.3. Mainstreaming Climate Change  
Policies - A Study in the Indian  
Context
- Vikramaditya Singh Malik and Hina  
Doon*
- 247 7.4. The Road to Copenhagen: the Indian  
Perspective
- Yenneti Komalirani and Joshi Gaurav*
- 253 7.5. Strategies for the Development of  
CDM Framework - the Indian  
Experience in Terms of Institutional  
and Financial Mechanisms
- Joseph Masinde*
- 275 7.6. African Countries in Front of Climate  
Change: the Kenyan Experience and  
How to Move Forward
- Lutchmeeduth Bullywon*
- 283 7.7. Accelerating the process of  
Sustainable Development in  
Mauritius as a strategy to climate  
change adaptation and mitigation
- Alireza Karbasi, Sarah Rafieirad,  
Mahdie Mossannan Mozafary, and  
Zahra Ghafary Moghadam*
- 287 7.8. Policies based on U-shape  
relationships between environmental  
quality and GDP levels



		<i>Shafa Aliyev</i>	
297	7.9.	Transition in oil-producing countries: the strategies and the experience of Azerbaijan	
		<i>Valentino Piana</i>	
303	7.10	Green Microfinance	
331	8.	POLICIES FOR SUB-NATIONAL REGIONS	
		<i>Jeo Lee and Geoff Stewart</i>	
313	8.1.	Climate Change, Location Choice and Household Welfare	
		<i>Valentino Piana</i>	
317	8.2.	Sectoral Euthanasia in Heavily Polluting Regions	
321	9.	POLICIES FOR CITIES	
		<i>Valentino Piana</i>	
323	9.1.	LOVAMOS – Locally Viable Alternative Mobility Systems	
		<i>Piotr Matczak, Ilona Banaszak, Michal Beim</i>	
327	9.2.	Framing Climate Change Policies Compatibly with Stakeholders' Mental Models: a General Analysis and an Application to Bicycle Transportation Development as a Climate Mitigation Policy	
		<i>Valentino Piana</i>	
337	9.3.	Green Taxi Fleets	

341	PART III – IMPLEMENTATION
	<i>Valentino Piana</i>
343	10. THE IMPLEMENTATION: CHALLENGES AND GUIDELINES
	<i>Valentino Piana – with boxes by Dragana Konstantinovic, Miljana Zekovic, Jelena Atanackovic-Jelicic and Stephen Ouma Otieno</i>
359	11. EXPLORING A FEW EXAMPLES OF IMPLEMENTATION
379	CONCLUSIONS
381	AUTHORS’ PROFILES
389	HOW TO CONTACT US
393	APPENDIX 1 – THE CANCÚN AGREEMENTS - OUTCOME OF THE WORK OF THE AD HOC WORKING GROUP ON LONG- TERM COOPERATIVE ACTION UNDER THE CONVENTION (AWG-LCA)
417	ACRONYMS
419	BIBLIOGRAPHY
441	INDEX

# **Interactive Government: Leadership, Commitment, Communication and Reputation**

**– Valentino Piana and Kua Harn Wei**

In the 21<sup>st</sup> century, people are living and working in a world that is getting smaller and more interconnected. Hence, firms find themselves in a more competitive environment in which everyone aspires to a better life. This interconnectedness of the world also implies that the messages launched and direction promoted by political leaders quickly come into the global focus.

The role of the state is under redefinition, after the ideological debates of the XX century, by becoming “interactive”, i.e. capable of entering in a dialogue with society at large to single out issues to be effectively moved forward.

This is particularly evident in the climate change domain. Globally, politicians have reacted for decades to scientists’ calls for action against climate change in a number of ways - from negation and marginalization, to rhetorical worry and genuine care. Since 2007 Fourth Assessment Report of the Intergovernmental Panel on Climate Change, the scientific evidence has grown compelling and a few leaders have given a strong voice of support for actions to mitigate, or adapt to, climate change. The political and institutional discourse about climate change is entering into a new phase, and the 2009 United Nations Climate Change Convention COP15 was expected to produce a number of new commitments and obligations. For these to be finally reached and implemented, a global movement that requires strong leadership from every government is necessary and critical.

It’s a government that signs the legal texts and takes responsibility for what happens within its borders, but, domestically, governments will need to address the actual GHG emitters and provide the conducive environment for delivering.

Leadership means finding the necessary simplification of a complex issue, proposing a narrative of interpretation, judgment and direction for action, and assuring that the state will do “everything needed” to cope with the problem. The strategies implemented should also seize the opportunity to gather all the necessary attention for the challenge of climate change by intertwining it to other key issues, related to economic, environmental and social development of the state. They are sometimes called the “co-benefits” of climate change strategies but they often are the main interest of constituencies, making rather climate change strategies dependent on them.

Leadership is also required to secure a country and safeguard its developmental conditions and prospects in a world where climate change is shaping the long term well-being of natural ecosystems, human societies, global, national and local economies. A

leader must be able to indicate the path to be followed, raise awareness, mobilize resources and foster new laws to move the country out of the “business as usual” mode, while connecting with the real capabilities, feelings and wills of the individuals citizens and residents. These individuals can not only control their own actions but also in several cases exert an impact on the decisions taken by the organizations to which they belong.

In this vein, an evolutionary approach offers a justification for real changes in organizational routines and systemic interactions in response to calls from leaders, in contrast to the neoclassical belief that only price can provide signals to the agents.

There are many ways a leadership can be exerted - many different styles and communication methods, which are deeply entrenched in national traditions and current political landscape. Leaders interpret the specific role of the state that prevails in a certain country, in comparison with the strength of business forces and civil society, in ways that can be vastly different among countries and politicians. In particular, political leadership does not exclude the use of market instruments or relying on private action to reach the goals.

Conversely, many scientists and technologists are saying that “it lacks only the political will for climate change to be contrasted and reverted”<sup>35</sup>. Business is waiting for a proper economic framework rewarding emission reduction, clean methods of production and adaptation measures. People can be moved into sustainable patterns of consumption, transport and work by proper dialogue, incentives and disincentives, and by reshaping the spectrum of options available. While policies for mitigation may be implemented by various stakeholders, it is primarily the responsibility of political leaders to commit, and show their commitment, to mitigation policies and actions.

Commitment means to really do what one says, to pursue the goals that one enunciates, and to walk the talk, so to speak. However, to do the right thing is sometimes even harder than to identify what is right. Many people with obesity problems go on diet but do not stick to it.

All too often, people with heart attack risk really do what the doctor says only after the first heart attack. Catastrophic weather conditions have been associated to climate change for a long time. But it’s only after the damages done by Hurricane Katrina that the United States population and the world have another idea of the likely impact of climate change and the horrors due to inadequate adaptation measures. The objective reality of such catastrophes was in turn framed by the expectation that “hurricanes will come”, as evidenced in talks and films like Al Gore’s “An Inconvenient Truth”.

Thus, a key ingredient to prompt commitment is preparing the minds for possible future global warming-related disasters, relevant information of likely locations of these disasters and fostering an emotional, affective connection with those people who have been hurt in past disasters (O’Neill, Whitmarsh, 2009).

If we can identify ourselves with people having suffered from heart attack, perhaps we begin taking action before it happens to us. Likewise, it will be easier to motivate commitment if there is a common feeling of belonging to the same planet, with sympathy for people living elsewhere.

To demonstrate commitment, politicians have five key measures to take (Maister, 2008):

1. To choose, for key positions and roles of power, people that have already shown commitment;
2. To organize and prompt technical committees to work out feasible solutions;
3. To praise and reward any step forward made by ordinary citizens, firms and organizations;
4. To adopt in their own lifestyle simple measures that show adherence to the same principles;
5. To quickly accomplish long overdue obligations taken and promises made in the past, where partial or total unfulfillment has resulted in skepticism;

Communication of these measures is crucial in order to coordinate action towards the common goal, integrating all the decision-making processes that occur at local levels. Regarding point 1 above, not all capable individuals are interested and willing to take on positions of power. One way is to provide these individuals with opportunities to “try out” leadership roles by addressing local issues. This implies a more decentralized mode of leadership.

The challenge in this arrangement is to ensure that decisions taken at the local levels are, as far as possible, congruent with and reinforces the national or district sustainability goals. A positive example can be seen in Singapore. This country is divided into 5 districts – central, southwest, southeast, northeast and northwest. Each district is led by governmental agency known as a Community Development Council (CDC), and each has its own community and sustainability program. The Southwest CDC (SWCDC) provides a range of decentralized leadership and governance opportunities to provide feedback on various government issues or suggestions on policy directions and measures. Its main task force that tackles environmental issues is the Environmental and Health Functional Committee (EHFC), which is composed of four sub-committees in charged of “Green” (i.e. biodiversity and greening of environment), “Clean” (i.e. providing a hygienic living environment), “Health” (i.e. encouraging residents to adopt an active and healthy lifestyle) and “Cool” (i.e. promoting energy efficiency and waste reduction) issues. However, committee and sub-committee members – who are drawn from the different sectors of the society and are either appointed by the district Mayor or self-nominated – may also choose to play leadership roles in the task force to come out with the Southwest ECo Plan (2009) (a district level sustainable development blueprint)<sup>60</sup>. There are also

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<sup>60</sup> <http://www.southwestcdc.org.sg/1216951915545.html>.

individuals who work for the ECo Plan without having long term commitment under the EHFC. To ensure that these different individuals and working groups make policy suggestions that are congruent with the district and national level sustainable development goals, the Mayor's office pays attention to disseminate materials to the different task force and committees so that members are aware of what the other units are doing or have done.

The effective communication channels established and utilized by the SWCDC ensures that the works of these different units do not conflict or even overlap with one another too drastically; this communication capacity also affords more opportunities for capable individuals to choose the way and extent to which they want to play leadership roles in addressing issues of their preference.

Proposals forwarded by technical experts may not be feasible from the policymaking perspective. With regards to point 2 above, communications between technical expert groups and policymaking or policy analysis groups must be fostered. In the earlier days, studies of the material flows and stocks of a society yielded sets of data that could not be readily utilized by politicians in formulating local, national or international policies and laws. The main reason is that academic researchers are usually interested in the descriptive or normative discourse of the implications of the flows and stocks in an economy, from which proposals for technical and policy strategies may ensue; however, often, these policy strategies are either thought to be too difficult or uneconomical (or both) to be implemented by the policymakers due to prevailing conditions. However, if policymakers' perceptions of a set of proposed solutions to a problem are foreshadowed by the impression or memory of the prevailing conditions of the past, then they may not be open-minded enough to meticulously examine the content of the proposed solutions before passing their judgment. In summary, technical experts and policymakers should collaborate on research and development projects so that the results of these projects can be direct applications to policy formulations.

Aside from incentives granted by either governmental or non-governmental agencies to encourage stakeholders to take initiatives to mitigate emissions, the press also plays an important role in communicating the success stories of these honored individuals or organizations to the general public. These reports have the potential to motivate more people to follow suit. In fact, political leaders should utilize media channels such as newsletter, blogs and websites, to further communicate the significance of these success stories and messages underlying the governmental policies and laws that reward these successes to a wider audience. Internet is a huge accelerator of bi-directional and multi-directional flows of information.

Internet and the mass media will also be a useful platform to tell stories of political leaders who show commitment by demonstrating environmental good conduct in their daily lives. Conversely, there are also examples in which news and reports of political leaders who do not do what they preach are communicated to the public to serve as a kind of public shaming.

On a much larger scale, interactive governments build over time a strong the reputation - a key asset for any policy-maker. Reputation of delivering promises, genuinely seeking consensus, and providing energy to move issues forward is crucial to induce real change in others' behaviors. As Rischard (2002) proposes, global networks of committed citizens and member of a wide variety of organizations, across country and social borders, can evaluate, rate, praise and blame specific politicians and policy makers, providing an agora where reputation is evidenced.

Finally, in order to accelerate the implementation of climate change policies and thus accomplish obligations, we must know that climate change goals can only be accomplished as a group effort – by involving and engaging a very wide array of stakeholders. This is so because the number and nature of issues to be addressed in formulating an effective set of climate change solutions is vast and varied. For example, in order to encourage the industry's uptake of pozzolanic building materials that can replace the use of cement and concrete (the cement industry is one of the most prolific emitters of carbon dioxide in the world), an entire industry that can efficiently manufacture or recycle these pozzolanic materials must be established. Moreover, when the demand for cement decreases in a country, there must be plans to diversify the businesses of cement manufacturers so that they can also benefit from this gradual switch away from the use of cement. In fact, one of the reasons why the use of recycled materials and cement-replacement materials has not been able to secure a foothold in the construction industries in most countries is that the cement industries have become too entrenched into the existing economic system and that they are either unwilling or unable to diversify their businesses. In this case, the stakeholders who need to be involved in encouraging cement-replacement are the cement manufacturers, industry players associated to the pozzolanic materials, industry players in the industries in which the cement manufacturers may diversify their businesses, architects, structural engineers, material scientists, building developers, buildings users and owners and policymakers (local, national and even international ones who may be involved in cement trading).

In addressing these widely varied (and, in some cases, conflicting) issues, political leaders should consider the use of a wide suite of policy tools to bring about desirable changes in the behavior of concerned stakeholders. These tools can be roughly categorized as economic instruments (including taxes and rebates), research and development initiatives (which can be government-funded or otherwise, or both), stakeholder organizations (such as the support to workers' unions and the formation of alliances), legislations (including codes and compulsory standards), voluntary agreements and educational or outreach programs.

The greatest challenge in policymaking for sustainable development and climate change mitigation lies in the fact that the process has to take into account so many issues and stakeholders, and that policymakers must consider and decide which policy tools are the most appropriate in every situation. Kua (2007) suggested an information flow model to

design what he called coherently integrated policies for promoting sustainability. This model is essentially a way for government leaders to effectively communicate their sustainability goals to the different stakeholders, so that the policies designed at the different levels and sectors of the society can be as coherent and integrated as possible. It proposes a series of probing questions and steps that require policymakers to understand how the policy decisions taken based on economic, social and environmental reasons at one level (say, local) does not (or, at least minimize) conflicts with those taken at another level (say, national). Furthermore, it also suggests a way to check if the policy decisions taken on one particular developmental issue may cause undesirable cross-over impacts (also known as problem-shifting) on to another developmental issue. The complete model is illustrated in fig. 1.

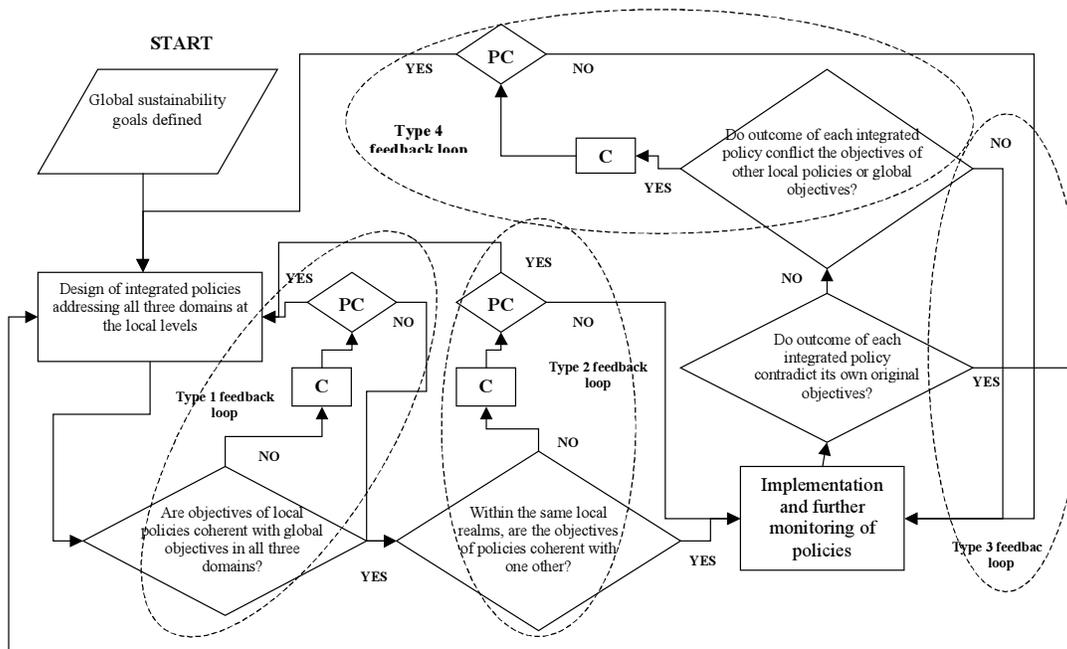


Fig. 1. The proposed information flow framework for coherently integrated policymaking. The “C” block represents cross-level interaction of stakeholders to address any contradictions or conflicts, as well as mobilization of new resources to address any problem-shifting. The “PC” condition means that there are changes to the policymaking process as a result of such cross-level stakeholder