

Globethics Repository



Energy efficiency and conservation as ethical responsibilities

This page was generated automatically upon download from the Globethics Repository.
More information on Globethics see <https://www.globethics.net>. Data and content policy
of Globethics Repository see <https://repository.globethics.net/pages/policy>.

Item Type	Preprint
Authors	Rock Ethics Institute
Publisher	Rock Ethics Institute, The Pennsylvania State University
Rights	With permission of the license/copyright holder
Download date	2026-09-24 22:30:14
Link to Item	http://hdl.handle.net/20.500.12424/175508

Climate Ethics

Ethical Analysis of Climate Science and Policy

People; | Departments; | Penn State


[Home](#)
[Speak Up](#)
[Climate](#)
[Bioethics](#)
[Education](#)
[Leadership](#)
[About](#)
[Contact](#)
[About Climate Ethics](#)
[Blogroll](#)
[Subscribe](#)
[Contact](#)

Energy Efficiency and Conservation as Ethical Responsibilities: Suggestions for the Future Work of IPCC Working Group III

By [Rock Ethics Institute](#) on March 13, 2008 6:37 PM | [0 Comments](#) | [0 TrackBacks](#)

I. Introduction

This paper provides a brief assessment of the ethical issues raised by the Intergovernmental Panel on Climate Change's (IPCC) Working Group III report, Mitigation of Climate Change.¹ It argues that energy efficiency and conservation are not simply two more options that can be employed to address climate change; they are the most equitable and sustainable options.² Energy efficiency involves doing the same amount of work, or producing the same amount of goods or services, with less energy.³ Energy conservation is a broader term; it involves using less energy, regardless of the whether energy efficiency has changed.⁴ The other major options available to address climate change are direct reduction of greenhouse gas emissions, long-term storage of carbon, and adaptation.

The paper argues that Working Group III should issue a special report in the near future assessing the potential of energy efficiency and conservation to contribute to stabilization of greenhouse gas emissions in the next ten years. It also argues that Working Group III should directly address developed country leadership in future reports, especially on per capita energy consumption and greenhouse gas emissions.

After summarizing the Working Group III report, this paper describes three ethical principles stated in the United Nations Framework Convention on Climate Change that are particularly relevant to efficiency and conservation, and how they indicate that energy efficiency and conservation should be prioritized. This paper then explains these recommendations.

II. Working Group III.

The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP) to provide "decision-makers and others interested in climate change with an objective source of information about climate change." The complexity, global scale, and importance of the climate issue made it necessary to have an international body that could authoritatively assess what we know and do not know. According to its web site, the IPCC's role is to "assess on a comprehensive, objective, open and transparent basis the latest scientific, technical and socio-economic literature produced worldwide" concerning human-induced climate change.⁵ The IPCC, which is comprised of several thousand climate scientists and other technical experts, does not do its own research or recommend policies. In 2007, the IPCC was awarded the Nobel Peace Prize (with former U.S. vice president Al Gore) for its work.

The IPCC has produced four climate change assessments since 1990. The most recent of these was in 2007. It has three major parts: The Physical Science Basis (the report of Working Group I),⁶ Impacts, Adaptation, and Vulnerability (Working Group II),⁷ and Mitigation of Climate Change (Working Group III).⁸ In addition, a Synthesis Report pulls together major themes from the first three reports.⁹

The 2007 Working Group III report synthesizes and reviews new literature from a variety of disciplines related to climate change mitigation. The report is comprehensive, lengthy (more than 800 pages long), and impressive; hundreds of authors with a great range of expertise contributed to it.

An initial chapter sets out a series of "framing issues;" particularly the relationship between climate change and sustainable development. Other framing issues include decision making; risk and uncertainty; cost and benefit concepts; mitigation, vulnerability, and adaption relationships; distributional and equity aspects, technology; and regional dimensions. The report then reviews greenhouse gas emission trends; the report finds that global GHG emissions increased 70% between 1970 and 2004, with the largest growth coming from the energy supply sector.¹⁰ The report then describes mitigation options for both the short term (until 2030) and long term (after



SUBSCRIBE

- [Entries](#)
- [Comments](#)
- [Delicious](#)
- [iTunes U](#)
-

SEARCH THIS BLOG

☒ Full Text ☐ Tag

CATEGORIES

- [Adaptation and Responsibility for Damages \(12\)](#)
- [Allocation Issues \(4\)](#)
- [Atmospheric Targets \(13\)](#)
- [Civil Disobedience and Climate Change](#)
- [Contraction and Convergence \(2\)](#)
- [Copenhagen \(12\)](#)
- [Distributive and International Justice \(13\)](#)
- [Economics and Climate Change \(4\)](#)
- [Economics and Cost \(11\)](#)
- [General Climate Ethics \(17\)](#)
- [Human Rights-Universal Rights \(3\)](#)
- [Independent Responsibility to Act \(6\)](#)
- [Media Coverage of Climate Change \(3\)](#)
- [Mitigation \(2\)](#)
- [New Technologies \(1\)](#)
- [Procedural Justice and Fair Process \(7\)](#)
- [Scientific Uncertainty and Risk \(4\)](#)
- [Trading Issues \(1\)](#)
- [Uncategorized](#)
- [cap and trade \(1\)](#)
- [climate change and markets \(1\)](#)
- [climate change governance \(1\)](#)
- [climate change policy-making \(1\)](#)

MONTHLY ARCHIVES

- [August 2010 \(1\)](#)
- [July 2010 \(1\)](#)
- [June 2010 \(2\)](#)

2030). It describes a range of policies, measures, and instruments that are available to mitigate climate change. These include changes in behavior and lifestyle, advances in technology, upgrades to energy infrastructure and improved energy efficiencies.¹¹ Reductions in GHG emissions not only have a positive effect on climate change, but can also provide co-benefits in areas such as improved health and energy security.¹² In addition to a discussion of cross-sectoral mitigation options, the WGIII report includes a separate discussion of mitigation options for each of the following sectors: transportation, buildings, industry, forestry, agriculture, waste management. The report also describes in detail the relationship between sustainable development and climate change mitigation.¹³ Significantly, there is no stand-alone chapter on energy efficiency and conservation, and the report does not distinguish in any sustained way between the responsibilities of developed and developing countries.

III. Ethical Preference For Efficiency And Conservation

Three normative principles recognized by international law create a preference for energy efficiency and conservation. These are developed country leadership, equity for developing and vulnerable countries, and the right to sustainable development.

These principles are stated in the United Nations Framework on Climate Change.(UNFCC)¹⁴ These are not, in other words, principles that are important only to developed or developing countries, to a particular religious or ethical perspective, or to a specialized academic movement that has no basis in the Convention itself. They were agreed to by parties to the Convention and provide the basic approach that nations use in annual conferences of the parties and in their decision-making. It therefore is appropriate and even necessary for the IPCC to use these principles in its analysis of the options available for climate change mitigation.

Parties to the UNFCC will, of course, need to make use of all available options, and not simply efficiency and conservation. The point is that efficiency and conservation are different in kind from other available options for reducing carbon dioxide emissions because they reduce the demand for fossil fuels and can be done right away. As Working Group III points out, there is an obvious need for "immediate short-term action."¹⁵ Similarly, an international assessment of the ethical dimensions of climate change concluded that "various ethical systems converge in the conclusion that atmospheric levels of GHGs should be stabilized at the lowest possible levels above existing atmospheric GHG concentrations."¹⁶ It is thus incumbent upon decision makers to prioritize efficiency and conservation.

A. Developed Country Leadership.

Developed country¹⁷ leadership in the Convention is premised in part on the fact that "the largest share of historical and current global emissions of greenhouse gases has originated in developed countries."¹⁸ It is also premised on the greater technological ability and financial resources of developed countries.¹⁹ Put simply, developed countries have contributed the most to the problem and have the greatest ability to address it. They thus have an ethical responsibility under the Convention to take a leadership role.

Developed country leadership is expressed as a decision-making principle in Article 3, which sets out several principles that the parties are to consider: "the developed country Parties should take the lead in combating climate change and the adverse effects thereof."²⁰ It is also expressed as a legal duty in Article 4.2, which sets out the specific responsibilities of developed countries. Each developed country party

"shall adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs. These policies and measures will demonstrate that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions...."²¹

Developed country leadership creates a preference for energy conservation and efficiency as a means of reducing carbon dioxide emissions for several reasons. First, efficiency and conservation provide a set of options that can be implemented right away. In the short term (2000-2030), energy efficiency and conservation can deliver more cumulative emissions reductions than other carbon dioxide mitigation options.²² A major effort on behalf of efficiency and conservation within the boundaries of developed countries would likely significantly reduce their greenhouse gas emissions. This is particularly important because it does not appear that national policies anywhere have yet had much effect on the upward trajectory of global greenhouse gas emissions. Efficiency and conservation provide the best-short term means for developed countries to demonstrate their leadership in addressing greenhouse gas emissions. Energy efficiency and conservation also address the largest and fastest growing source of greenhouse gas emissions. Carbon dioxide from fossil fuel use represented 56.6% of anthropogenic greenhouse gas emissions in 2004. Carbon dioxide from fossil fuel is also the fastest growing source of greenhouse gas emissions, having grown by about 80% between 1970 and 2004.²³ Carbon dioxide emissions from fossil fuels were relatively stable during that period in western Europe (at about four gigatons of carbon dioxide annually), grew in North America (from almost five gigatons of carbon dioxide to nearly seven gigatons), and grew very rapidly in Asia (from about one to about seven gigatons).²⁴ By that measure, western Europe is showing more developed country leadership than North America. Because energy efficiency and conservation can significantly reduce the demand for fossil fuels in the short term (and the long term), they provide a way of arresting the growth of carbon dioxide emissions from fossil fuels.

February 2010 (2)
January 2010 (1)
December 2009 (3)
November 2009 (1)
October 2009 (8)
September 2009 (2)
August 2009 (4)
June 2009 (1)
May 2009 (1)
April 2009 (2)
February 2009 (1)
January 2009 (5)
December 2008 (2)
October 2008 (1)
August 2008 (1)
July 2008 (3)
June 2008 (3)
May 2008 (1)
April 2008 (1)
March 2008 (2)
February 2008 (1)
January 2008 (1)
December 2007 (2)
November 2007 (3)
October 2007 (2)
July 2007 (2)
April 2007 (1)
January 2007 (2)

JOIN US ON



Finally, efficiency and conservation provide the most immediate means for developed countries to reduce their per capita greenhouse gas emissions. Developed countries have much higher levels of per capita greenhouse emissions. Developed countries, with 20% of the world's population, are responsible for 46% of the greenhouse gas emissions. Developing countries, which contain the other 80% of the world's population, contribute 54% of the greenhouse gas emissions.²⁵ At the same time, the greenhouse gas intensity of developed countries--greenhouse gas emissions per dollar of GDP--is much lower than it is developing countries. With 57% of the world's GDP, developed countries have a greenhouse gas intensity of 0.68 kilograms of carbon dioxide equivalent per U.S. dollar in GDP. Developing countries, which have 43% of the world's GDP, have a greenhouse gas intensity of 1.06 kilograms of carbon dioxide equivalent per dollar of GDP.²⁶ Despite their low per capita greenhouse gas emissions, in other words, the greenhouse gas intensity of developing countries is nearly double that of developed countries.

Developed country leadership would mean reductions in per capita greenhouse gas emissions. Developed country leadership would also mean significantly improving their greenhouse gas intensity. Efficiency and conservation, again, provide the most immediate means of achieving those results. Developed country leadership should also mean helping developing countries to significantly improve their greenhouse gas intensity, using their generally superior technical and economic resources.

B. Equity for developing and vulnerable countries.

In some ways, equity for developing and vulnerable countries is the other side of the developed country leadership coin. Developing countries have done the least to contribute to historic and current greenhouse gas emissions. They tend to have the fewest financial and technological resources. They thus have the least responsibility for the problem and the least ability to reduce their own emissions.

But there is another and equally fundamental dimension to the equity principle: developing countries are most vulnerable to the adverse effects of climate change because they have least financial and technological ability to successfully adapt. For some developing countries, there is also a topographic dimension; small and low lying island nations (all of which are developing countries) have no ability to prevent sea level rise from climate change. Thus, the least responsible countries are also the ones who are likely to experience the most adverse effects.

In consequence, Article 3 states another decision-making principle:

The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration.²⁷

Equity for developing and vulnerable countries would counsel for stabilizing and reducing atmospheric GHG levels as soon as possible. That would, after all, reduce or avoid negative impacts to the most vulnerable (e.g., Inuit peoples, Africa, small island states). Because efficiency and conservation provide the best means for reducing emissions in the short term, they provide the greatest opportunities to foster the principle of equity to developing and vulnerable countries.

C. Right to sustainable development.

Sustainable development is a framework for fostering and improving human quality of life and well being by integrating economic development, human rights, peace and security, and environmental protection. It applies not only to the current generation; it applies as well to future generations as well. Sustainable development is the officially recognized international approach for maintaining and improving the human condition.²⁸ The Convention states: "The Parties have a right to, and should, promote sustainable development."²⁹ This right is stated not as an individual human right but as a right that is held by states. It does not refer only to developing countries or developed countries; it is held by all states.

Efficiency and conservation are the most economically attractive of the four basic options to address climate change, and thus the options most consistent with sustainable development. Only one of the four basic options--direct control of greenhouse gas emissions, long-term storage of carbon, adaption to climate, and energy efficiency and conservation--offers the prospect of cost savings. That option is efficiency and conservation. The first three all involve additional costs, at least where modern energy is not already present.

In addition to economic benefits and greenhouse gas mitigation, efficiency and conservation can bring other benefits as well. These co-benefits include reduced demand pressure on energy prices, strengthened local and national economies, improved bottom lines for business, creation of more opportunities for job creation and technology development, protection of the poor and those on fixed incomes, reductions in other air pollutants (e.g., sulfur dioxide, particulates), and better protection of public health. All of these, in turn, foster sustainable development. It is true that renewable energy also provides a similar set of co-benefits. But at the moment, energy efficiency and conservation generally can provide those co-benefits at a lower cost in areas where there is already access to modern energy.

For developing countries, there is also an expectation that per capita emissions from developing countries will rise as their economies grow. Put differently, the parties agreed that developing countries would not be locked into poverty or low-development status by the atmosphere's limited ability to receive greenhouse gas emissions without causing adverse climate change effects. The

Convention's preamble states that: "per capita emissions in developing countries are still relatively low and...the share of global emissions originating in developing countries will grow to meet their social and development needs."³⁰ For developing countries, then, the right to sustainable development embraces continued economic development. Economic development is more likely to the extent that energy and greenhouse gas intensities in developing countries are lower.

For developed countries, a primary object is to make their existing high levels of development more sustainable. That means reducing their disproportionately high greenhouse gas emissions so that, among other things, per capita emissions in developed and developing countries converge. The right to sustainable development reinforces developed country leadership because it means that developed countries should create attractive and replicable models of sustainable energy use.

IV. Possible Next Steps For Working Group III

Two steps in the future work of Working Group III--a special report on energy efficiency and conservation, and direct attention to the issue of developed country leadership--illustrate the application of the principles stated above. The idea is not that the IPCC would do new research, but rather that it would analyze existing literature in light of these principles.

A. Special Report on Efficiency and Conservation

The IPCC should consider issuing a special report on energy efficiency and conservation in near future. The report should address potential of energy efficiency and conservation to contribute to stabilization of greenhouse gas emissions in the next ten years. The report should include a detailed analysis of a "highest effort" potential for conservation/efficiency as well as less ambitious scenarios.³¹ The special report would, among other scenarios, describe the level of greenhouse gas emissions that could be achieved in the next ten years if governmental and nongovernmental entities exerted their best efforts.

Working Group III relies on two kinds of studies to assess the potential for energy efficiency and conservation. One is "top down" studies, which look at the entire economy. The other is "bottom up" studies, which look at particular industries or economic sectors. Studies of the policy-based potential for energy efficiency and conservation do not rest on technical judgments about the physical limits of conservation and efficiency; they rest instead on assumptions such as the number and kind of legal and policy tools employed and the financial and institutional resources committed to those tools. A particular study might look simply at the potential for reducing energy consumption in new buildings through upgraded building codes, for example, or it also assess the potential for reducing energy use at existing buildings. A study might assume that a program for energy efficiency assistance for low income persons will reach 100,000 homes a year, or it might assume that the program will reach one million homes a year.³² Different assumptions, particularly in the "bottom up" studies, can lead to very different projected levels of energy savings. Because of the importance of significant and short-term cuts in greenhouse gas emissions, it would be helpful for the IPCC to determine how much efficiency and conservation could be achieved if our "highest effort" was devoted to it. This report should also describe how to overcome barriers, with particular attention to what has been demonstrated to be effective. When it is not possible for the report to be quantitative--whether for the lack of appropriate studies or other reasons--the report should be qualitative.

To be sure, the Working Group III report describes efficiency and conservation options in considerable detail, particularly in the chapters on industry, buildings, transportation, and agriculture. A special report on efficiency and conservation would be of particular importance, however, for several reasons. First, it would have considerable public education value because, among other things, of the broad distribution of, and media reports concerning, the report itself. In addition, the special report would focus on efficiency and conservation across all sectors, including common themes and issues. There is no comparable chapter in WGIII report. Finally, as already noted, it is not clear that the sectoral analyses of efficiency and conservation in the Working Group III report use the same methodologies and assumptions that would be applied for such a report.

This suggestion would further the principle of sustainable development for both developed and developing countries because of the environmental, security, and social benefits that reduced energy use can deliver, often at a cost savings. It would further the principle of developed country leadership because it would describe how much efficiency and conservation developed countries could achieve within their own borders and how much they could assist developing countries to reduce their greenhouse gas intensity through technological, economic, and capacity building assistance of various kinds. Finally, it would further the principle of equity for developing and vulnerable countries because it would demonstrate a path for significant short-term reductions in greenhouse gas emissions.

B. Developed Country Leadership

Working Group III should specifically and separately consider in its future reports the issue of developed country leadership, especially on per capita energy consumption and GHG emissions. Because of their high energy use, developed countries could likely significantly reduce per capita emissions with greater efficiency and conservation (WGIII), and their failure to reduce per capita emissions would compromise the world's ability to meet the Convention's goal of preventing dangerous anthropogenic interference with the climate system.

Thus, Working Group III could describe legal and policy measures for developed countries that would lead to reduced per capita energy consumption and GHG emissions and that are

consistent with sustainable development. These options could be set out with a quantitative assessment of the likely range of emissions reductions for each measure, both individually and cumulatively.³³ As part of this effort, the IPCC should assess in detail the contribution of lifestyle/behavior changes in developed countries can make to reducing per capita energy consumption and greenhouse gas emissions.³⁴

By:

John C. Dernbach
Professor of Law
Widener University

He can be reached at jcdernbach@widener.edu.

This paper was presented at a side event, Ethical Dimensions of Climate Change: Looking at the Work of the IPCC, at the *Conference of the Parties to the U.N. Conference on Climate Change in Bali, Indonesia*, on December 14, 2007.

Endnotes:

1 INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, WORKING GROUP III REPORT: MITIGATION OF CLIMATE CHANGE (2007), <http://www.ipcc.ch/ipccreports/ar4-wg3.htm> (last visited December 26, 2007).

2 An exception would be for people not now served by modern energy, for whom renewable energy and other options may also be as equitable and sustainable.

3 NAT'L ENERGY POL'Y DEVELOPMENT GROUP, NAT'L ENERGY POL'Y 1-3 (2001), available at <http://www.whitehouse.gov/energy/National-Energy-Policy.pdf>.

4 Id.

5 Intergovernmental Panel on Climate Change, About IPCC, available at <http://195.70.10.65/about/index.htm> (last visited November 27, 2007).

6 INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, WORKING GROUP I REPORT: THE PHYSICAL SCIENCE BASIS OF CLIMATE CHANGE (2007), available at <http://www.ipcc.ch/ipccreports/ar4-wg1.htm> (last visited December 26, 2007).

7 INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, WORKING GROUP II REPORT: IMPACTS, ADAPTATION, AND VULNERABILITY (2007), available at <http://www.ipcc.ch/ipccreports/ar4-wg2.htm> (last visited December 26, 2007).

8 MITIGATION OF CLIMATE CHANGE, *supra* note 1.

9 INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, SYNTHESIS REPORT (2007), available at <http://www.ipcc.ch/ipccreports/ar4-syr.htm> (last visited December 26, 2007).

10 MITIGATION OF CLIMATE CHANGE, *supra* note 1, at 3. The IPCC refers to the "energy supply sector" broadly to encompass a variety of power generating sources.

11 Id. at 11-15 (prior to 2030) & 15-18 (after 2030).

12 Id. 669-672.

13 Id. ch. 12.

14 United Nations Framework Convention on Climate Change, U.N. Doc. A/AC.237/18 (1992), reprinted in 31 I.L.M. 849 (1992) [hereinafter "Framework Convention"].

15 Id. at 47.

16 ROCK ETHICS INSTITUTE, PENN STATE UNIVERSITY, WHITE PAPER ON THE ETHICAL DIMENSIONS OF CLIMATE CHANGE 18 (2006).

17 As used in this paper, developed countries refers primarily to those in Annex II of the Convention—developed countries that are not considered to be in transition to a market economy.

18 Framework Convention, *supra* note 14, preamble.

19 Id. art. 4.3, 4.5, & 4.7.

20 Id. art. 3.1.

21 Id. art. 4.2.

22 MITIGATION OF CLIMATE CHANGE, *supra* note 1, at 203.

23 Id. at 27 & 28.

24 Id. at 261.

25 Id. at 30.

26 Id.

27 Framework Convention, *supra* note 14, art. 3.2.

28 John C. Dernbach, Sustainable Development as a Framework for National Governance, 49 CASE WESTERN L. REV. 1, 17-32 (1998).

29 Framework Convention, *supra* note 14, art. 3.4.

30 Id. at preamble.

31 John Dernbach and the Widener University Law School Seminar on Energy Efficiency, Stabilizing and Then Reducing U.S. Energy Consumption: Legal and Policy Tools for Efficiency and Conservation, 37 ENVTL. L. REP. (Envtl. L. Inst.) 10,003, 10,028-10,030 (2007).

32 Id. at 10,019 (U.S. Department of Energy's Low Income Weatherization Assistance Program weatherized 105,000 homes in 2002 even though 28 million homes were eligible).

33 While efficiency and conservation are particularly important here, the list need not be limited to such measures.

34 A substantial literature already exists on this subject. See, e.g., Michael P. Vandenbergh & Ann C. Steinemann, The Carbon-Neutral Individual, 82 N.Y.U. L. REV. 1673 (2007); John C. Dernbach, Overcoming the Behavioral Impetus for Greater Energy Consumption, 20 PAC. MCGEORGE GLOBAL BUS. & DEV. L.J. 15 (2007); Paul C. Stern, Director, Committee on the Human Dimensions of Global Change, National Research Council, Why Social and Behavioral Science Research is Critical to Meeting California's Climate Challenges, Presentation to the California Energy Commission (Dec. 12, 2006) (Power Point presentation); Loren Lutzenhiser, Social and Behavioral Aspects of Energy Use, 18 ANN. REV. ENERGY & ENV'T 247 (1993); COMMITTEE ON BEHAVIORAL AND SOCIAL ASPECTS OF ENERGY CONSUMPTION AND PRODUCTION, COMMISSION ON BEHAVIORAL AND SOCIAL SCIENCES AND EDUCATION, NATIONAL RESEARCH COUNCIL, ENERGY EFFICIENCY IN BUILDINGS: BEHAVIORAL ISSUES 38-39 (Paul C. Stern, ed., 1985); Paul C. Stern & Gerald T. Gardner, Psychological Research and Energy Policy, AMERICAN PSYCHOLOGIST, April 1981, at 329.

Categories: [Distributive and International Justice](#)

Tags: [Energy](#)

NO TRACKBACKS

TrackBack URL: <https://blogs.psu.edu/mt4/mt-tb.cgi/112927>

LEAVE A COMMENT

[Sign in](#) to comment, or comment anonymously.

Name

Email Address

URL

☐ Remember personal info?

Comments (You may use HTML tags for style)

[Preview](#)

[Submit](#)

[Home](#)