Workshop on Faith, Energy and Society
Friday 3 March 2017

Introductory Remarks: Prof. Michael Pollitt, Judge Business School, University of Cambridge
Prof. Pollitt introduced the event by positioning the workshop within the broader Energy@Cambridge project. Energy@Cambridge is a research initiative at University of Cambridge dedicated to bringing together the activity of over 250 academics to tackle the technical and intellectual challenges of energy, science, technology and policy research. Within that initiative, 'In Search of "Good" Energy Policy' is a Strategic Research Initiative Grand Challenge focused on developing and delivering collaborative activities in order to understand the principles of formulating 'good' energy policies from diverse perspectives.

In keeping with the collaborative, interdisciplinary goals of the Grand Challenge the Workshop on Faith, Energy and Society brought together academics and practitioners from different religious traditions for two important reasons. First, even though not everyone identifies with a particular religion, a significant proportion of the global population does. Second, religious traditions have a track record of asking fundamental questions about purpose, motivations, and the values that shape individuals and society. Thus it is important to understand and apply their perspectives to such an important issue.

Session 1: Cultural drivers of 'bad energy policy': insights from faith traditions
Chair: Dr. Jonathan Chaplin, Kirby Laing Institute for Christian Ethics and Divinity Faculty, University of Cambridge

Dr. Hilary Marlow, Faraday Institute and Faculty of Divinity, University of Cambridge
Dr. Marlow's presentation focused on the resources and beliefs provided in the biblical text of (what Christians call) the Old Testament as well as Pope Francis's 2015 encyclical *Laudato Si': On Care for our Common Home*. Within the biblical tradition, we see that God is at the centre of the universe, and earth is part of His creation that reflects His creativity. Given that, it has intrinsic value and is not just for human benefit—it reveals God's glory and it exists to worship Him. For example, Job 38:25-27 tells us that God brings rain on the desert even where there is no human life and is acting even when there are no humans involved. In addition, the Old Testament presents a clear link between human action and the earth such that human action has consequences on the physical earth. Regarding human beings, Genesis tells us that we are formed from the dust and will return to the dust, we are earth–keepers, 'created in the image of God' with a responsibility to represent God in the world. Finally, the Old Testament contains many social critiques decrying land grabs and deprivation, as well as an intolerance of greed, and exploitation of the poor—all of which are also portrayed as having an impact on the land in addition to humans.

Laudato Si' provides a contemporary analysis based on the biblical witness. In it Pope Francis makes a strong appeal that energy policies, and environmental policies generally, must be integrated with social concerns, and that ecological debt and other imbalances are justice issues. He is also critical of 'the technocratic paradigm', the predominant narrative of unending

growth, and the inordinate role played by finance in our thinking and acting. All these serve to exploit the earth and other people reducing them to economic calculations. In the end Francis provides a vision for cultivating the 'virtues' where our relationship with creation is part of a spiritual journey that requires 'repentance'. He also suggests that we need to return to a way of engaging with the world in a 'contemplative' rather than a 'consumptive' manner.

Dr. Ed Kessler, Woolf Institute

Beginning by referencing similarities with the perspective provided by Dr. Marlow – given that the Hebrew Bible is shared by Christians – Dr. Kessler moved on to highlight additional elements offered by the Jewish perspective. From his perspective there are two particular tensions to keep in mind when talking about good policy: first, a need to protect the environment while fostering energy independence, and second, given the location of the state of Israel, there is a need to consider energy security.

Regarding specific principles from the tradition, the Hebrew Bible tells us that the earth is God's and that we are called to 'till' and 'tend' the land. Thus, humans are understood as partners within creation. A quote from the rabbinic teachings in *The Ethics of the Fathers* indicates the need for aggressive action on this front: "If I am not for myself, who will be for me? But if I am only for myself, who am I? If not now, when?" Related to this action, the need for leadership and prudence is of importance, as is addressing the needs of the poor via equitable distribution.

The Jewish tradition also teaches that there is an obligation to avoid unnecessary waste, as for example in Deuteronomy 20: 19-20 which tells the people not to destroy the trees of the enemy during war. Similarly, there is a stress on protecting creation for future generations, as depicted in a story in *Avot d'Rebbe Natan.* The story goes so far in this direction that it ends by teaching that if a man is planting a tree and the messiah appears, he should finish planting the tree before going to greet him.

Finally, Dr. Kessler highlighted the need for interfaith dialogue, cooperation and solidarity – a theme that continued to be developed throughout the day.

Dr. Fazlun Khalid, Islamic Foundation for Ecology and Environmental Sciences

Dr. Khalid's presentation was concerned not only to state the theological position of Islam, but also to ask the question "What got us here?" For Khalid, it is not only important to know our own beliefs, but to understand what else is at work in driving cultural change so that the faith traditions are not simply carried away by the happenings of, for example, the World Economic Forum. After stating that Islam is an inherently environmentally concerned religion – although that aspect of it needs to be recovered – the focus of his presentation was taken up with the impacts of modernization.

He argued that before the industrial revolution, people did not view the earth primarily in terms of economics and how to better ourselves, but rather there was a subconscious integration with nature. This era was also dominated almost exclusively by what today we call 'renewable energy'. However, after the industrial revolution there was a shift in thinking that

led humans to see themselves as in charge of nature rather than integrated with it and subject to the divine. It was during this time that many of our modern institutions emerged—particularly banking—as well as the perceived necessity of economic growth.

Here an important critique emerged that was echoed throughout the day. The tradition is highly critical of the banking industry and financial intermediation that drives the economic growth that is the basis for contemporary society. The primary basis for this critique is its foundation in usury which the Qur'an says is, in effect, 'prostrating to the devil'. Given this particular religious belief, as well as the disastrous impacts the need for endless economic growth has created for the environment, then the banking system is a critical aspect to be examined and reformed. Rather than a worldview that sees humanity in control of nature and driven by the pursuit of economic growth, there must be a return to seeing humanity as interwoven in the fabric of the natural world and an acceptance of the divine so that we inhabit the world rather than exploit it.

Response 1: Dr. Sandy Skelton, Dept of Engineering, University of Cambridge
Dr. Skelton spoke to two areas where faith groups can contribute to a culture that engenders good energy policy.

1. It is easy to point out the history of excessive consumption and to critique that from a religious perspective, but there is a need to shift the perception of mainstream 'normal' behaviour. For example, Frank Trentmann's historical account of consumption illustrates that addressing private morality and ostentatious consumption is not enough but in order to make a dent in energy usage we need to shift the perception of normal behavior in more mundane activities such as showering and heating.

2. There is also a need to for faith groups to encourage acceptance of regulation and climate change. Given that there is often a disconnect between values and actions (see below for a further explanation of this) then the effect of demand-side change will be limited and so we need to learn to accept government-led change as well.

Response 2: Dr. David Good, Dept of Psychology, University of Cambridge
Dr. Good articulated a challenge to our understanding of the beliefs of each religion and how they translate to responsibility and action, from the standpoint of the theory of planned behaviour in psychology. According to this theory, the beliefs and attitudes one holds do not necessarily predict behaviour. What matters is how those are translated into an intention to act, and this intention is affected by two things in addition to the beliefs themselves:

1. Our intention to act is affected by how our subjective norms are influenced by the normative beliefs of our primary identity group—such as a faith group. Though one may hold a certain attitude, it may be at variance with the group norm. As a result, if one's identity in the group is particularly important one may go with the group norm rather than one's own belief. In this case, asking how one would act in a certain situation is less predictive than asking, "What do you think somebody like you would do?"

2. The extent to which people believe they can take action, or feel it is their responsibility to take action, also predicts intention to act. If one does not think it is possible—or one's responsibility—to have an impact or take action whether in general or personally, one will be less likely to engage in the behavior associated with their belief.

Group Discussion

- *How can faith communities contribute to a stronger relationship between beliefs and action at a personal and communal level?* Ideas in response to this questions included creating 'nudges' and addressing the sense of inertia related to climate change – a barrier that does not seem to be so present with other moral issues such as extreme poverty (e.g., while we know we can't end extreme poverty, we do still donate). Practical examples were provided of how direct education and work with people addressing problematic behaviors can be effective (one was attempts to change the behaviour of fishermen who had been dynamiting coral reefs).

- *How should we deal with the fact that religion can also be mobilized against positive policies regarding climate change?* This question came up at multiple points throughout the day, given that there seems to be a weak linkage between religious belief and positive action regarding energy policy—and when the link is there, it can have a negative rather than positive association. The question was not specifically resolved, other than to note this as an area to keep in mind for future work, and to encourage religious believers to be modest about claims they make for the capacity of their faiths to bring about change.

- *How do we define what it means for humans to have 'dominion' over creation, as stated in Genesis?* This has been defined differently throughout history and continues to have various interpretations. Those interpretations can have a significant impact on what is seen as good policy, and definitions that tend more toward exploitation can certainly have negative implications, as indicated by the first question.

- *Given that the majority of the content from presenters either explicitly or implicitly criticized the free market specifically, and 'modernity' in general, how do we recognize the good that the free markets do?* While the basic question was left unresolved, responses included, first, the need to challenge endless economic growth as a paradigm; second, that perhaps modernity was good at the outset and in some of its significant achievements but now needs to be re-examined for the future. The free market can be recognized as a tool that can be used for harm or good, but there is also the need to seek agreement around social goods behind the free market. Finally, questions were raised as to whether trickle-down economics works, and even whether the 'free market' really exists.

Session 2: Allocating Responsibility for 'good energy policy': insights from faith traditions
Chair: Dr. Marc Ozawa, Good 'Energy' Policy

Prof. Tim Cooper, School of Architecture Design and the Built Environment, Nottingham Trent University

Prof. Cooper began by sharing insights on good energy from the Christian tradition and then provided some analysis based on his current research. Regarding good energy policy, drawing on a report entitled *Faith and Power,* Cooper said good energy should reflect love of the creator, express care for the whole creation, be informed by Christian principles of wise stewardship, peacemaking, justice, love of neighbour, and moderation in consumption.

Cooper's current research focuses on sustainable design and the impact of material consumption on climate change. Given the fact that industry drives nearly one-third of global energy demand, with most of this used to produce bulk materials, a key response should simply be to produce less new material. An obvious area of opportunity is optimizing products to improve material efficiency.

Cooper's work reveals that change often requires responsibility at every level – from global institutional agreements, national governments promoting systemic change, companies incorporating socially responsible priorities, to church teaching and households making new lifestyle choices. For example, it is possible to acquire washing machines designed to last significantly longer than the average model. However, these are more expensive because the companies that produce them lack economies of scale and because government tax on production affects materials, labour, and energy in a way that does not incentivize producing energy-efficient goods. From this example it is clear that full-scale change requires change at all levels with the right policies to facilitate and incentivize production to make more sustainable goods, to households choosing lifestyles characterized less by always seeking of the latest gadget, to engaging in purchasing for the long term.

Dr. Hildegard Diemberger, Division of Social Anthropology, University of Cambridge

Dr. Diemberger focused on the importance of the individual in responsible action, a call to universal responsibility, as well as an integrated approach to understanding and action. Regarding personal responsibility, Buddhism requires simplifying one's own desires by meditation and 'mindful' living. In addition, it calls for compassionate consumption that considers the impact of one's own consumption on other sentient beings—including human, non-human and future beings. Given that Western economies use 100 times more energy per capita than is necessary for survival, it is clear that both indirect and direct energy consumption should be reduced and that business models should reflect this. Such models should be community based, sufficiency oriented, and decentralized in production and consumption.

Reading the landscape for the dangerous signs of climate change, the Dalai Lama has said that Mother Earth is teaching humanity a lesson and has called people to a 'universal responsibility' to address the related challenges.

Finally, Buddhist cultures also reveal a unique understanding of being in the world that is integrated with 'the spirits' in the world. Because of this integrated view, Buddhists experiment with combinations of old and new strategies; knowledge is situated and hybrid. They respond

to empirical evidence, spiritual practice and reading, and collective forms of decision making. These are all elements of consideration that can be useful when addressing significant challenges from environmental degradation, the need for good energy policy, and how to understand responsibility in this arena.

Gopal Patel, Director Bhumi Project, Oxford Centre for Hindu Studies
According to Mr. Patel, in the Hindu tradition energy is sacred because it is actually part of God. As with everything in Hinduism, responsibility ultimately lies with the individual. Since no two paths in life are similar, the paths one walks have different experiences and different responsibilities. The responsibility is on the individual for living a good life, and what dictates a good life is driven by the individual, the phase of life, and the occupation.

Within that variance at the individual level, there is a belief that we all belong to a universal order – *Ṛta*—and thus the overall responsibility of each person is to maintain that order. Some principles for upholding that order include sustaining and upholding (*dharma*), non-harming (*ahimsa*), non-stealing (*asteya*), and self-restraining (*tapasya*).

Within the realm of the environment and energy policy, the principle of asteya would tell us that we should not consume to the point of harming others, while the principle of tapasya would say that we should exercise some restraint on our own happiness for the sake of other people. As a result, one way to structural action to raisee people out of poverty in Hinduism is addressed by limiting consumption, greed and personal excesses (tapasya) is not a strong theme in Hinduism, rather there is a focus on reigning in personal excesses.

Response 1: Prof. David Newbery, Faculty of Economics, University of Cambridge
Prof. Newbery's response focused on the responsibility governments hold and the tension that exists in allocating responsibility—a tension between efficiency and equity.

- *The Tension: Efficiency and Equity, Markets and Government*. Based primarily on the principle of utility, governments set out policy objectives and then determine the right instruments to achieve those objectives. Within this decision-making framework there is a tension, in allocating responsibility, between the principles of efficiency and equity. Governments often delegate efficiency across different agencies (e.g., Ofgem) to regulate the market, while at the same time they are tasked with maintaining equity of distributional impacts. They do this via holistic systems of taxes and expenditures.

  Related to the debate on the good of free market, it is important to recognize this tension between equity and efficiency and reflect on its implications. Some points and questions that arose in this area included:
  - With increased privatization and a shift away from government action, how can we create and maintain accountability for equity?
  - Recognize that economists do not leave everything to the market and also include a focus on understanding regulations and their distributional impacts.
  - There is a need to make sure market signals and incentives are right.

- A tension between equity and efficiency remains and must always be examined.
- Here a role for civic engagement and religious input exists to press for a holistic definition of the good that includes social justice.

Response 2: Dr. Jim Platts, Dept of Engineering, University of Cambridge

Dr. Platts focused on the importance of individual responsibility. He argued that in discussing who should take responsibility we must be careful not to point the finger at others without taking responsibility in each of our own spheres of influence. It was argued that, in the history of social change, many individuals who take initiative are often people of faith and that such individuals committed to change can make a sustained difference over time. For example, compare the wind energy industry as it was in its early development in the 1980s to the amount of energy it now produces and the number of people it now employs. He argued that it is important to create an atmosphere where people feel safe and confident to share ideas for change.

Group Discussion

- *What's the right combination of grassroots and top-down leadership to achieve results?* Examples were provided that demonstrate the importance of both grassroots action, as well as top-down leadership. Though each can be effective on their own, an ideal would be when individuals and leaders are working together. For example, in an initiative among UK churches to do 'green audits', it was noted that what worked best was a combination of strong leadership and a committed, passionate group of individuals.

- *The importance of entrepreneurship.* Throughout the course of conversation, many encouraging examples were provided that highlighted the powerful role of entrepreneurs in this area. Such examples served to highlight that individuals and organizations taking action where they are can really effect change. As a result, responsibility also includes recognizing and encouraging such efforts and also ensuring that they have access to funding. One such example is a campaign being developed by the United Nations in India in order to enable funding flows to NGOs and faith traditions which have established trust among various stakeholders.

- *Which countries have responsibility and how can we work together?* It was recognized that leadership on climate change is shifting to places like India, China, and Africa. The West has done its damage and the future will depend on these other countries. Examples were provided of how those countries are taking this question seriously. On this several points and questions arose:
    - Notably as this conversation took place in the setting of the western academy, what is the appropriate role of the rest of the international community?
    - People in developing countries see the world differently and therefore it is important to understand these differences when we are discussing drivers, motivations and aspects of energy policy.

- *Meat consumption.* A specific example of individual responsibility was the issue of meat consumption. Hindus working within the environmental arena find it difficult to take others seriously in their work if they are not reducing their own meat consumption first. This may be one of the most visible examples of a religious conviction leading to concrete action.

Session 3: Policy applications: moderated round table
Chair: Prof Michael Pollitt, Judge Business School, University of Cambridge

Dr. Jeremy Kidwell, Dept of Theology and Religion, University of Birmingham
Dr. Kidwell supported the goal of incorporating religious beliefs into reflection on energy policy but noted that it is complicated and inchoate. This is a result not only of intricacies within the traditions but also of governments' generally low level of religious literacy. In the UK, while they have a desire to engage with the public it is worked out more in the language of 'British values' than in the unique languages of faith. At the same time, religion is often viewed by scholars as something to be overcome rather than a resource. Given that religious groups and individuals can be tremendously effective in creating social change we need to focus both on strengthening the link between belief to action and on changing the attitudes and understanding of policy makers toward religion.

Dr. Jacqueline Lam, Dept of Electrical and Electronic Engineering, Hong Kong University and ERPG, University of Cambridge
Dr. Lam emphasized the need to focus on long-term, personal transformation in addition to government policies that approach the issue from an economic or regulatory approach and in addition to education about the issues. The Christian tradition reveals that true faith has the power to be transformative beyond education, facts, and information. For Christianity, it comes back to a love of God and love of others and as one's life begins to be moved towards these directions then actions will follow that are perhaps more deeply rooted than others.

Dr. David Reiner, Judge Business School, University of Cambridge
Playing "devil's advocate", Prof. Reiner reminded the group that despite religious beliefs, the role of religion in environmental policy is actually weak. In recent history, emissions have been going up and few things have actually impacted this upward trajectory including the Kyoto and Paris agreements. In his view, only a few factors have exercised a measureable impact: the collapse of the Soviet Union and the global financial crisis in 2008-2009. Population control policies such as China's one child policy was also likely have had a measureable impact, but this issue has been taken out of discussion due to human rights concerns. He also cited vegetarianism in India as a practice that likely has a measurable impact.

Saba Khalid, Islamic Foundation for Ecology and Environmental Sciences
Saba Khalid focused on the prominent theme in Islam—a critique of the international banking system. From the standpoint of Islam, banks run on the most prohibited of sins—usury. She argued that Wall Street and global banks are not interested in the consequences of their actions and that ordinary people are left with no power over what they possess. Thus, a major area for religious focus should be reforming the banking system.

Group Discussion
Group conversation returned to many of the themes from throughout the day but two additional ideas also surfaced:

- We need to develop strong leadership within religious organizations in order to get spirituality back into public discourse. For example, in Latin America many seminaries are sponsored by energy companies which could limit how leaders are able to speak out.

- Religion offers a substantive, nuanced and sophisticated understanding of 'the good' that is not simply represented by, for example, eliminating poverty. We must try to narrate it in such a way that commands our imaginations rather than simply being a reaction to conditions.

Concluding Remarks, Dr. Jonathan Chaplin
The following four key points capture some key provisional conclusions emerging from the workshop.

First, every faith tradition emphasized an 'interconnectedness' between all things – the various human realms of society and economy and the natural environment – that needs to be discerned and restored. This stands against modernity's attempts to separate these areas from each other and to remake the world according to its own design. The call for better 'interdisciplinary work in the academy is one attempt to try to recover this interconnectedness. However, this raises the question of whether the academy—largely driven by pragmatic concerns and, in social sciences, a 'constructivist' social theory which struggles with any idea of 'givenness'—has an adequate epistemology and ontology to ground this work.

Second, faith traditions should recognize that religions that profess to embody a better way of living ought to be exercising some measurable impact and be able to display an evident relationship between belief and actions. Given the current weak linkage, any 'prophetic' challenge regarding the environment coming from religion should be addressed to faith communities first, before being addressed to wider society.

Third, that said, it's clear that there are important religious resources that can be applied to the challenge of good energy policy. Some traditions, particularly the more monotheistic faiths, provide strong theories of institutions, and thus distinctive structural critiques and proposals for reform. For example, there seems to be a shared concern to bring about the decentralization of power— in the economy, the polity, energy production and distribution — and a recognition of the dysfunctionality of modern capitalism through excessive domination by finance and debt. Meanwhile, the perspectives presented from the Dharmic religions importantly contained a strong and equally important emphasis on personal, individual transformation in order to effect change – though this is also present in, for example, the Christian tradition of the 'virtues'.

Fourth, some specific applications for good energy policy have emerged. One is that we must recognize and affirm the value and effectiveness of appropriately regulated markets, overcoming a common religious aversion to market exchange and wealth creation. However, the religious traditions have strong resources to question how we define 'wealth' and what 'good' market exchange is, so that markets serve a richer notion of the common good. We also need economists who can do the hard work of translating these rich ideas into good economic theory. Another is that, in keeping with religion's distinctive contribution of offering substantive definitions of 'the good', we must affirm that any definition of, for example, 'sustainability' should include the intrinsic value of the earth and the environment and is not simply based on economic calculations or anthropocentric values. Finally, all the traditions affirm that any 'good' energy policy must include attention to social justice and equitable distribution. These impacts should be considered not just at the level of national state action but also in localized, community initiatives and impacts.

Works cited by presenters at the workshop:

- *Living Lightly, Living Faithfully: Religious faiths and the future of sustainability*, eds. Colin Bell, Jonathan Chaplin, and Robert White
  http://faraday.st-edmunds.cam.ac.uk/resources/Books/LivingLightly.pdf
- *Light for a New Day: Interfaith Essays on Energy Ethics*, ed. Dr. Erin Lothes Biviano
  http://www.greenfaith.org/programs/Light%20for%20a%20New%20Day%20-%20Interfaith%20Essays%20on%20Energy%20Ethics/complete-booklet-of-essays
- Pew Research Center Religious Landscape Study, 2007
  http://www.pewforum.org/religious-landscape-study/views-about-environmental-regulation/
- Millennium Ecosystem Assessment http://www.millenniumassessment.org/en/index.html and the Economics of Biodiversity and Ecosystems http://www.teebweb.org -- Note that these resources were presented critically as examples of reports and analysis that focus on human needs rather than including the intrinsic value of the earth
- Coalition for the Environment and Jewish life, 2008 and 2012, 2015 reports
  Example: http://www.coejl.org/resources/jewish-community-priorities-for-climate-and-energy-policy-2008/
- Jewish Environmental Policy Principles:
  http://jewcology.org/resources/climate-and-energy-policy-principles/
- Jewish Climate Change Campaign
  http://www.arcworld.org/downloads/Jewish-CCC-7YP.pdf
- *Faith and Power: The Case for a Low Consumption, Non-Nuclear Energy Strategy*, Christian Ecology Link, 2006, Tim Cooper
  http://www.christian-ecology.org.uk/fp-summary.htm