



# Dupont Summit 2017

*Science, Technology, and Environmental Policy*

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## Presentation

### **“Rethinking Renewable Energy Policy: Forging a New Politics of Truth”**

In this study, I use renewable energy – specifically biofuels and hydropower – as a platform from which to launch an exploration of this question: What kind of cultural and epistemological shifts are needed to generate the critical insights necessary to address dynamically complex global problems, and what will it take to initiate such shifts? Renewable energy research and policy discourse can provide insights into the way that conventional approaches to complex problems yield outcomes that, while they may temporarily mitigate some symptoms, do not address the fundamental roots of the problem. Technical interventions applied to symptomatic problems can lead to a vicious cycle in which yet more interventions chase after problems resulting from previous interventions. At some stage, this cycle of intervention adds so many variables to the mix that the problem morphs into something yet more complex and threatening, making it impossible to untangle causal factors from well-intended interventions.

Complex problems, sometimes referred to as “wicked” problems, are characterized by numerous known/unknown variables and by the fact that, because their contours are continuously in flux, no single fixed definition can adequately represent them.<sup>1</sup> Core values form the driving force behind the emergence of such problems. Hence, the only way to get to the heart of them is to examine and interrogate the core values that shape them. In general, renewable energy technologies are designed to address a problem(s) framed in terms of the climate threats posed by excessive burning of fossil fuels. This framing has the effect of reducing a highly complex socio-economic problem to some of its symptoms, mainly those symptoms (carbon emissions) amenable to technological interventions.

Why the singular focus on symptoms? At least in part, the explanation lies in the tendency to frame environmental issues in technological terms, leading to situations in which “critical reason has ceased to exercise its controlling function over norms and ends”.<sup>2</sup> The dominant means-oriented approach to producing knowledge privileges those issues amenable to technological interventions; often such issues are symptoms of fundamental structural problems deeply rooted in society. The danger in this means-oriented approach is that “the ends are provided by nonrational forces, either by positive traditions or by arbitrary decisions serving the will to power”.<sup>3</sup> That is, because ends and the core values that shape them are not explicitly articulated and debated, they will be decided arbitrarily by powerful interests and/or hidden agendas. Complex problems such as climate change and global warming are deeply rooted in the core values that have shaped our society, one heavily dependent on

<sup>1</sup> Healy, Stephen (2011). “Post-normal Science in Postnormal Times,” *Futures*, Vol. 43, 202-208.

<sup>2</sup> Tillich, Paul (1951). *Systematic Theology*, Vol. I, Reason and Revelation, Being and God, Chicago: University of Chicago Press, pg. 73.

<sup>3</sup> Ibid.

infrastructures requiring uninterrupted supplies of on-demand energy. Policies and interventions aimed at addressing problems reduced to their symptoms are actually quite risky since failure to address fundamental structural issues will ultimately exacerbate the existing problem.

Forging a new politics of truth means revisiting the way dominant knowledge-production approaches legitimate and/or de-legitimate knowledge claims. The predominance of technical reason in renewable energy discourse means that knowledge claims that are not verifiable by the methods employed by mainstream energy practitioners (i.e. researchers, policymakers) do not receive the hearing they deserve. In this context, the kind of reason that begins by interrogating ends and articulating the values that shape them – ontological reason – defies retrofitting into technical frameworks, and is therefore discounted or marginalized.

Initiatives launched by a number of universities including my own provide an excellent opportunity to reestablish the appropriate balance between ontological and technical reason.

These initiatives involve revisiting conventional single- and multi-disciplinary approaches to scholarship with the goal of developing scholars better equipped to address complex problems. This includes defining scholarship in terms of “problem spaces” rather than in terms of specific disciplines. The problem-centric approach places significant emphasis on defining and comprehending (as much as possible) problems within the specific contexts that have shaped them. People with divergent perspectives must be full participants in the conversation. The practitioners of a diverse array of academic disciplines must seek common ground with each other and with the practical lived wisdom of community members. Together, these divergent perspectives must develop shared conceptual frameworks to define and represent the problem. To be genuinely effective, this process must begin with an interrogation and reevaluation of values along with the development of means that are in accordance with clearly articulated ends.

In making my case, I engage a combination of theories from Michel Foucault, several systematic theologians, and various scholars of transdisciplinary research<sup>4</sup>.

*Speaker*

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<sup>4</sup>Daly, Mary (1973). *Beyond God the Father: Toward a Philosophy of Women's Liberation*, Boston: Beacon Press.

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