### 1NC- Framework

#### Interpretation—the purpose of the ballot is to answer the resolutional question: is the outcome of the enactment of a topical plan by the United States federal government better than the status quo or a competitive policy option

#### They claim advantages independent of the plan and the imagination of governmental action.

#### 1. “Resolved” before a colon reflects a legislative form.

**Army Officer School** 20**04** (5-12, “# 12, Punctuation – The Colon and Semicolon”, <http://usawocc.army.mil/IMI/wg12.htm>)

**The colon introduces** the following: a. A list, but only after "as follows," "the following," or a noun for which the list is an appositive: Each scout will carry the following: (colon) meals for three days, a survival knife, and his sleeping bag. The company had four new officers: (colon) Bill Smith, Frank Tucker, Peter Fillmore, and Oliver Lewis. b. A long quotation (one or more paragraphs): In The Killer Angels Michael Shaara wrote: (colon) You may find it a different story from the one you learned in school. There have been many versions of that battle [Gettysburg] and that war [the Civil War]. (The quote continues for two more paragraphs.) c. A formal quotation or question: The President declared: (colon) "The only thing we have to fear is fear itself." The question is: (colon) what can we do about it? d. A second independent clause which explains the first: Potter's motive is clear: (colon) he wants the assignment. e. After the introduction of a business letter: Dear Sirs: (colon) Dear Madam: (colon) f. The details following an announcement For sale: (colon) large lakeside cabin with dock g. **A formal resolution, after the word "resolved:" Resolved: (colon) That this council petition the mayor.**

#### 2. “United States federal government should” means the resolutional question concerns the imagination of outcome of the establishment of a policy by the government.

Jon M. **Ericson** 20**03** (Dean Emeritus of the College of Liberal Arts – California Polytechnic U., et al., The Debater’s Guide, Third Edition, p. 4)

The Proposition of Policy: Urging Future Action In policy propositions, **each topic contains certain key elements**, although they have slightly different functions from comparable elements of value-oriented propositions. **1. An agent doing the acting ---“The United States” in “The United States should adopt** a policy of free trade.” Like the object of evaluation in a proposition of value, **the agent is the subject of the sentence. 2. The verb should**—the first part of a verb phrase **that urges action**. 3. An action verb to follow should in the should-verb combination. **For example, should adopt here means to put a program or policy into action though governmental means**. 4. A specification of directions or a limitation of the action desired. The phrase free trade, for example, gives direction and limits to the topic, which would, for example, eliminate consideration of increasing tariffs, discussing diplomatic recognition, or discussing interstate commerce. Propositions of policy deal with future action. Nothing has yet occurred. **The entire debate is about whether something ought to occur**. What you agree to do, then, when you accept the affirmative side in such a debate is to offer sufficient and compelling reasons for an audience to perform the future action that you propose.

#### Reasons to prefer—

#### 1. Fairness:

#### A. Predictable limits—there are limitless investigations of democracy assistance and debate practice, but the grammar of the resolution is based on enacting a policy. We can’t predict disconnected from the resolutional question.

#### B. Ground—they make stable ground impossible because they can always claim ‘critical’ outweigh disads to the plan or shift their advocacy to avoid impact turns—must hold them to a central question for productive argumentation and idea testing.

#### 2. Education:

#### A. Switch-side testing—changing the ballot from a yes/no question about desirability of the plan undermines effective argumentation because there is no point of stasis to continually re-interrogate.

#### And, this idea testing is the best model for creating understanding and fostering tolerance.

Gordon **Mitchell et al.** 20**07** (Eric English, Stephen Llano, Catherine E. Morrison, John Rief, and Carly Woods, Pitt Comm Studies Grad Students, Gordon Mitchell is an Associate Comm Studies Professor @ Pitt, Communication & Critical/Cultural Studies 4)

It is our position, however, that rather than acting as a cultural technology expanding American exceptionalism, **switch-side debating originates from a civic attitude that serves as a bulwark against fundamentalism of all stripes. Several prominent voices reshaping the national dialogue on homeland security have come from the academic debate community and draw on its animating spirit of critical inquiry.** For example, Georgetown University law professor **Neal Katyal served as lead plaintiff ’s counsel in Hamdan, which challenged post-9/11 enemy combat definitions**. 12 The foundation for Katyal’s winning argument in Hamdan was laid some four years before, when he collaborated with former intercollegiate debate champion Laurence Tribe on an influential Yale Law Journal addressing a similar topic.13 Tribe won the National Debate Tournament in 1961 while competing as an undergraduate debater for Harvard University. Thirty years later, Katyal represented Dartmouth College at the same tournament and finished third. **The imprint of this debate training is evident in Tribe and Katyal’s contemporary public interventions, which are characterized by meticulous research, sound argumentation, and a staunch commitment to democratic principles**. Katyal’s reflection on his early days of debating at Loyola High School in Chicago’s North Shore provides a vivid illustration. ‘‘I came in as a shy freshman with dreams of going to medical school. Then Loyola’s debate team opened my eyes to a different world: one of argumentation and policy.’’ As Katyal recounts, ‘‘the most important preparation for my career came from my experiences as a member of Loyola’s debate team.’’14 **The success of former debaters like Katyal, Tribe, and other sin challenging the dominant dialogue on homeland security points to the efficacy of academic debate as a training ground for future advocates of progressive change**. Moreover, **a robust understanding of switch-side technique and the classical liberalism which underpins it would help prevent misappropriation of the technique to bolster suspect homeland security policies. For buried within an inner-city debater’s files is a secret threat to absolutism: the refusal to be classified as “with us or against us,” the embracing of intellectual experimentation in an age of orthodoxy, and reflexivity in the face of fundamentalism.** But by now, the irony of our story should be apparent\***the more effectively academic debating practice can be focused toward these ends, the greater the proclivity of McCarthy’s ideological heirs to brand the activity as a ‘‘weapon of mass destruction**.’’

#### B. Stasis—

1. Subject Formation—absence of shared yardsticks for argument and the mismatch of interpretational scope limits out the possibility of debate.

Diana Panke 2010 (Lecturer of Politics at the University College Dublin, Review of International Studies, Volume 36, Issue 01, January 2010 p. 145-168)

Discourses take place in many political, judicial and societal arenas within and beyond nation-states. They are alternatives to bargaining, voting or authoritative decision making and can foster consensus in pre- or post-agreement interactions.1 Compared to pre- agreement interactions, post-agreement interactions are rarely in the center of attention, although discourses matter in these settings, too. Judicial discourses take frequently place in international courts, such as the European Court of Justice (ECJ), the Court of the Andean Community, the Court of the European Free Trade Association. International judicial discourses are good laboratories to analyse dynamics of arguing. The density of exchanged arguments is very high and judicial discourses are, in this sense, most likely settings for successful arguing. At the same time, effective arguing is very difficult before courts, since the parties have eminently strong interests, because they maintained non-compliance despite being detected and did not negotiate pre-judicial settlements. In this sense, non-complying states are not open to persuasion. Drawing on the example of the ECJ with its mixed record of effective judicial discourses, this article analyses the conditions under which judicial discourses promote compliance. This requires tackling the more general question: Under which conditions can discourses foster consensus and when do they fail? The key to the answer is that the quality of arguments matters. If actors share a common standard for the assessment of the goodness of exchanged arguments, they can filter unconvincing and bad from convincing and good points and thereby incrementally develop a consensus. If they don’t have a common yardstick to evaluate the quality of claims, intersubjective validity cannot be achieved. Consequently, actors talk at crosspurposes although they exchange arguments and discourses end in dissent. The argument proceeds in five steps. The next section introduces the EU infringement procedure, demonstrates that judicial discourses take place for all cases that reach the ECJ, and illustrates that not all judicial discourses succeed in quickly fostering compliance (II). Why is it that arguing takes place in all cases but is not always effective? The subsequent section develops a theoretical explanation (III). Unlike Habermasian arguing or social psychology approaches on persuasion, 2 this article inquires into the quality of arguments in order to explain the varying success of discourses. Not every argument is per se good and suited to convince others. Arguing is only effective if actors exchange arguments and share a yardstick based on which they can commonly evaluate the quality of claims. Under these restrictive scope conditions, participants of a discourse can equally sort good from unconvincing arguments and thereby incrementally develop a consensus. If the parties lack a common standard with which they can intersubjectively assess the goodness of exchanged ideas, they talk at cross-purposes and discourses end in dissent – even though we might observe pure arguing. As a consequence, persuasion fails and non-compliance prevails. The German drinking water case illustrates this theoretical claim (IV). Germany violated the European drinking water directive (DWD) though a legal transposition that restricted the applicatory scope of the DWD and granted de facto many exceptions. While this saved compliance costs, it hampered the effectiveness of EU law. The European Commission opened an infringement procedure and referred the case to ECJ. A judicial discourse started, but failed in the first stage, since the parties lacked a common standard on which the quality of exchanged arguments could be equally evaluated and talked at cross-purposes. Later on, the advocates used arguments to which they could mutually relate in a meaningful manner and the judicial discourse became effective. Non-compliance could no longer be defended with good arguments and the argumentatively entrapped government quickly adapted the German drinking water policy in line with a demanding water quality approach. Alternative constructivist arguing and persuasion approaches as well rationalist enforcement, bargaining and principle-agent theories cannot sufficiently account for these compliance dynamics (V). The article concludes with the finding that intersubjective validity of arguments is the key to successful discourses. This requires that arguments are exchanged, that actors share quality yardsticks, and that the type of arguments fits shared evaluative standards. Only then, participants can commonly sort unconvincing and bad from good and convincing claims and incrementally arrive at a consensus. For example, truth-claims require a shared scientific paradigm; normative arguments a shared idea on righteousness. If either common evaluative standards are lacking or do not fit the type of arguments, discourses fail because the actors cannot meaningfully relate to each other but argue at cross-purposes. Common lifeworlds are important for effective arguing,3 since they inhibit shared reference standards for the evaluation of the quality of ideas. The presence of a European lifeworld is helpful, but not sufficient for effective arguing. Even in the EU, every discourse risks dissent, because a European lifeworld competes with domestic or party-political ones. Hence, if the meaning of a particular norm is contested, such as in the German drinking water case, a shared European lifeworld is too broad to decide which competing interpretation is superior. In such hard cases for effective arguing, judicial discourses offer an expedient: Judicial methods of interpretation serve as additional yardsticks to evaluate the quality of arguments. Yet, they only foster consensus, if actors exchange arguments and share methods of legal reasoning whose interpretational scope fit the interpretational scope of the problem at stake.

2. Ideational Change—no chance of ideational change in their framework—lack of agreement over truth or between competing paradigms eliminates discussion.

Diana Panke 2010 (Lecturer of Politics at the University College Dublin, Review of International Studies, Volume 36, Issue 01, January 2010 p. 145-168)

Judicial discourses accelerate argumentative speech acts. Yet, exchanging arguments is not sufficient to induce ideational changes, since not every argument is persuasive per se. Only good arguments can be convincing and possibly end norm violations. What characterises a good argument? Which ideas might change actors’ compliance interests? Simply put, the answer is that good arguments have to be intersubjectively valid. This requires that arguments are exchanged and that actors share a yardstick which allows them to equally assess the quality of arguments in a discourse. Truth, righteousness and appropriateness are three standards to intersubjectively evaluate the goodness of communicated ideas.19 If actors share a common conception of how to assess the quality of truth, normative and value-based claims, they can commonly factor out good from less compelling factual, normative or value-based arguments, substitute old by better ideas, and incrementally arrive at a consensus. A truth paradigm encompasses ontological, epistemological and methodological elements. Exchanged causal or factual arguments are conducive to ideational change and consensus, if the actors adhere to the same scientific paradigm and share expertise on the subject matter.20 Similarly, norm generating discourses can end in consensus, if actors share a standard of righteousness on which they measure how certain aims, procedures or scopes of norms express or hamper the fulfillment of their common interest. However, sharing a standard of righteousness does not help to solve questions of truth or vice versa. Common evaluative standards have to fit the type of arguments made. Unlike these discourses, judicial discourses deal with contested norms rather than truth claims or common interests.21 Once norms are contested, a dilemma emerges: in order to argumentatively solve norm interpretation conflicts, it would be necessary that actors consent on which common interest is expressed by a norm’s aim, procedure or scope, while the very fact that a case has been carried to Court indicates that there is dissent. Nevertheless, the parties of norm interpretation disputes are not trapped in talking at cross-purposes. Judicial discourses offer an expedient: different judicial methods of interpretation allow specifying what norms are about and to which situations they should be applied. In this sense, judicial methods of reasoning serve as additional yardsticks to commonly measure the quality of arguments. They differ in their interpretational scope. The broadest scope has the historical method of judicial interpretation, which specifies scope and content of legal norms through references to the initial will of the norm-creators.22 The teleological method is only slightly more specific, since it specifies the purpose and content of a norm though analysing the general aim of the broader legal context: What is the purpose of the treaties and how does it relate to the norm in question?23 The directive-immanent teleological interpretational device is more specific than the general teleological means, since it specifies content and scope of a disputed issue (for example, is exception X acceptable?) by analysing the general aim of the norm at hand. The general systematic method is a bit more specific than the general teleological one. It inquires into the broader legal context in order to solve interpretational questions of a norm embedded in the context: Is there another legal norm that delimits or specifies the meaning of the norm in question? The directive-immanent systematic method of legal interpretation is suited to solve more detailed interpretational issues by analysing the paragraph or article in question in the context of the whole legal norm: Are new concepts introduced in other paragraphs that define or delimit the issue in question? Are there exceptions in other parts of the norm that impact scope and content of the interpretational issue at hand? The wording method aims at solving interpretational differences of great detail by analysing the exact phrasing of the paragraph in question: Are new concepts introduced? How are they defined? Are exceptions specified?

#### C. policy is the only way to prevent ecological catastrophe

Manuel Arias-**Maldonado 12**, University of Malaga(Environmental Politics Vol. 21, No. 2)

On the other hand, it seems more realistic to accept that **individuals are not going to lead a social shift by themselves;** rather **they have to be nudged by policies** that stimulate a gradual change in collective behaviour. Both Sinnot-Armstrong and Jamieson recognise that **it is the governments’ task to implement realistic solutions** and enable civic virtue (CE, pp. 344, 325). Ultimately, **states are the key actors** in the path to sustainability, especially when considering the global dimension of climate change and the subsequent need for international cooperation. Yet states cannot rely on the old habit of planning, as Held et al. underline, but rather on the clever use of flexible regulation that promotes mitigation and adaptation through multiple policy instruments and cooperation between the public and the private sector (CG, p.105). The outcomes of this strategy are intrinsically open, thus calling for anoptimistic narrative. As David King writes: ‘I believe that the necessity for technological change will drive through these new technologies to meet necessary changes imposed by our circumstances. Such changes will arrive, and effective solutions will emerge’ (CG, p. 27). Admittedly, this path will be resisted by a good number of environmentalists, since it does not predetermine a given, morally acceptable shape for the future sustainable society. But then again, as Robert Goodin (CE, p. 242) is happy to conclude, ***environmentalists ought to be realists.*** Soltau’s (2009) **preference for a rough instead of a perfect climatic justice** comes to mind as well. Those who approach climate change from an ethical perspective will also reject this conclusion. This is understandable. The case for ethics is a strong one. Yet **it is** also **important** to go beyond ethics in order **to devise strategies that *may be effective in the world as it actually is*.** In this regard, it might be advisable to replace the rhetoric of ecological collapse with a more attractive, enticing one. Significant **sections of society have been alienated by** the way in which the issue has been framed so far: **either a romantic return to pre-industrial activities or a too negative view** of the problems at hand (CG, p. 4). **By doing this**, whether we like it or not, **climate change will remain a ghost in the social machine.** **A more positive view** of the climate challenge, and hence of sustainability**, is sorely needed. Otherwise** it may turn out that **we get the ethics right but the politics wrong*.***

#### D. This is a voting issue—limiting discussion to the question being asked is a prerequisite to effective communication.

### CP

**The United States federal government should establish a feed-in tariff that creates long-term purchase contracts for new qualifying facilities that use wind power, solar power, or wind and solar power for energy production to ensure a reasonable rate of return. We also advocate discussions of the interrelation between this governmental policy and race.**

**FiT’s solve inequalities of energy production – allows communities of all income levels to develop renewable energy profitably.**

Chad **Laurent 9**, Meister Consultants Group, Inc, with Wilson Rickerson & Hilary Flynn, http://www.worldfuturecouncil.org/fileadmin/user\_upload/PDF/FITness\_Testing\_Myths.pdf

Lower income individuals are disproportionately impacted by the added cost of a FIT. Only the wealthy can afford to install renewable energy systems. SUMMARY: **Feed-in tariffs can enable individuals from different income levels to invest in renewable energy.** This argument is again primarily aimed at renewable energy technologies, rather than at feed-in tariffs specifically, and has been a persistent part of the renewable energy dialogue for many years. **It is true that lower income individuals are often disproportionately affected by any shift in energy prices**. **Lower income individuals**, however, **also frequently bear a larger share of the environmental externalities associated with conventional power generation**. As discussed above, **analyses that ignore the externalities associated with “cheap” electricity ignore the health, security, environmental, and social benefits of renewable energy** With regard to whether or not lower income individuals can take advantage of feed-in tariffs**, feedin tariffs are better suited for less affluent individuals than most other renewable energy policy mechanisms** (Mendonça, Lacey, et al., 2009). **Many state RPS policies**, for example, **support only large-scale wind projects which are not structured to allow average Americans to invest in them**. Renewable energy project developers in the United States can also apply for federal tax credits, but those that qualify are typically either companies with sizeable tax liability or wealthy individuals. **FITs on the other hand, typically permit a broad range of investors to participate.** **Depending on the design, a FIT may be scaled to varying project sizes, making smaller projects financially attractive**. Furthermore, **because there is a steady revenue stream guaranteed via contract, banks are much more likely to lend individuals the initial capital to install a renewable energy system**. In Germany, for example, banks will typically lend 80% to 100% of a residential solar energy system’s cost based on the security of the feed-in tariff. **Feed-in tariffs based on generation cost are designed to generate enough revenue to cover debt service over the life of a loan. As a result, a solar energy system covered by a 100% loan under a properly designed feed-in tariff can be a low-risk investment for lower income individuals**.

**The nature of the global warming problem demands accepting scientific consensus**

Dennis Patrick **O'Hara** and Alan **Abelsohn 11**, Assistant professor of ethics as well as the Director of the Elliott Allen Institute for Theology and Ecology at the University of St. Michael's College and assistant professor in the Department of Family and Community Medicine, and the Dalla Lana School of Public Health and lecturer in the Centre for Environment, at the University of Toronto (Ethics & the Environment, Volume 16, Number 1, Spring)

Another disclaimer that has been used to justify delayed and inadequate responses to climate change argues that until there is scientific certainty about the causes and required responses to climate change, nations are not obliged to act. However, as early as 1990, the scientific evidence collected by the IPCC had determined that "emissions resulting from human activities are substantially increasing the atmospheric concentrations of the greenhouse gases…" (IPCC 1990, ix). **The scientific consensus of the** first **IPCC** Report (1990) **has been repeatedly validated and strengthened as successive reports** (1995, 2001, 2007) **used increasingly confident language concerning the anthropogenic causes of climate change**. Using the strongest language thus far, the most recent IPCC report declares that "**warming** of the climate system **is unequivocal**," and "**most of the observed increase in globally-averaged temperatures** since the mid-20th century **is very likely due to the observed increase in anthropogenic GHG concentrations**" where the words "**very likely" were defined as** an assessed probability of occurrence of >**90%** (Intergovernmental Panel on Climate Change 2007b, 72, 39, 27). **Such scientific consensus has** not only been forged in the IPCC reports but has also **been confirmed by other research bodies**, such as the National Research Council (USA) and the American Association for the Advancement of Science.11 With this in mind, the argument that developed nations need not act while scientific uncertainty concerning climate change exists can be discredited on two levels: the degree of scientific certitude needed before action is required, and the different roles for science and ethics. **The inevitable vicissitudes of daily living require humans to make the best decisions possible given the best information available; almost none of our decisions are made in the context of total certitude**. For instance, **we do not wait for certitude when formulating a medical diagnosis** or prescribing treatment **since** such **delays could lead to** the **demise** of patients. We act with the best knowledge at hand, especially when a preponderance of evidence favors a particular course of action and indicates that there is an urgent need to [End Page 40] act. Nor do we need to know the exact weight that a baby will have when it is born in order to agree that a woman is presently pregnant (McKibben 1989, 29). Although we do not know the fetus's eventual birth weight, we deny neither its present development nor the mother's pregnancy. **When the vast majority of credible experts** who have studied climate change **unanimously agree** that anthropogenic GHGs are directly related to climate change, **those who wish to argue otherwise must provide a comparable level of evidence** to support their contrary position, especially when current evidence indicates that delays in resolving climate change issues are associated with human mortality and morbidity. To delay an effective response to the adverse effects of climate change until absolute certitude exists and until every climatic mechanism is understood is to demand an unprecedented level of certitude. Given the deaths and DALYs attributable to climate change, **advocating delay is both immoral and perverse.** Furthermore, **while science determines when a risk is imminent, ethics decides if that risk is acceptable and if a response to the risk is obligated. Waiting for science to resolve all uncertainty related to the risk not only delays any response, it also shifts the decision-making solely to scientists, away from those who are either affected by the risk or are properly equipped to resolve moral questions**. Moreover, **scientific uncertainty does not absolve the agent from responsibility** for the consequences of the action to which some uncertainty is associated. Since humans universally reject actions that seriously endanger basic human rights to life, health and security, the duty to refrain from activities that endanger these rights, including via climate change, is sufficiently strong that appeals to scientific uncertainty cannot overrule the duty to avoid harm.12 An agent has a duty to avoid harm in direct proportion to the harm that could result from the action of the agent, especially when the consequences will be significant and will be borne by those who have not consented to be put at risk, as is the case with climate change (Brown et al. 2006, 27). Accordingly, the United Nations Framework Convention on Climate Change asserted that the Parties to that agreement should "take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures…" (United Nations 1992b, Article 3). **Developed nations have significantly increased GHG emissions that increase the risk to others**—they can no longer claim ignorance, nor have [End Page 41] they been able to do so since the late 1980s. Therefore they are accountable to those who have been harmed, and **they must not only provide reparation but** also **cease causing further harm.** They may not demand a level of certitude that significantly exceeds the certitude that we encounter in the rest of our lives. Indeed, the very planetary dynamics that formed the Earth and us, and which continue to evolve and to provide a context for our existence, are characterized by chance and uncertainty (Gould 2002). **To demand certitude**, scientific or otherwise, **contradicts the very pattern of our existence**.

**FITS are necessary for renewable transition**

**Masterson 10.** (Crystal D., Third Year student at University of Oklahoma College of Law, American Indian Law Review, “Wind-Energy Ventures in Indian Country: Fashioning a Functional Paradigm.” 2010. 34 Am. Indian L. Rev. 317 Lexis.)

**The feed-in tariffs require that every utility connect and give priority to all renewable-energy sources**, "using that energy first, rather than producing its own." n249 By requiring utilities to provide grid connection to all renewable-energy generators, the feed-in tariff system eliminates the discriminatory practices historically in place, which operate under a first-in-time approach. n250 Providing grid connection, however, may not be such a simple endeavor. **In remote locations, grid connection is often not feasible without the construction of new transmission capacity.** n251 **The most favorable way of approaching this problem is to require that utilities and developers share interconnection and infrastructure-upgrade costs in isolated areas**. n252 Of course, if the federal government were to fulfill its stated intentions of widespread expansion of [\*351] transmission capacity, n253 neither the utilities nor the developers would be forced to shoulder this burden. **The feed-in tariff contract provides renewable-energy generators with guaranteed per-kilowatt-hour payments for a definite period of time, often twenty years**. n254 Utilities must buy electricity from renewable-energy generators at incentivized rates for the twenty-year period. n255 **This long-term contract provides renewable-energy-project owners with stability and certainty**. n256 By offering such contracts**, feed-in tariff policies assure stable revenue streams, reducing the risks characteristic of renewable-energy investments while simultaneously reducing the overall costs of financing a renewable- energy project.** n257 The "long-term price security . . . remove[s] many barriers to rapid [renewable-energy] development**, creating conditions conducive to market growth**." n258 Within the long-term contracts is the guarantee of a fixed price above market rates. n259 To guarantee that developers enjoy profitable returns, "[p]ayments are set at pre-established rates, often higher than what the market would ordinarily pay." n260 The guaranteed pricing encourages development by creating "a low-risk investment environment" n261 and allows individuals and rural communities "to compete with utilities and large developers by requiring utilities to pay a fair price for [renewable] energy put into the grid by anyone." n262 **Guaranteed pricing also gives rise to the tangential effect of increased market competition**, which occurs as a result of ownership diversity. The market structure under the feed-in tariff system "**creates the mass markets and economies of scale necessary to drive down the cost of [renewable-energy resources].**" n263 Instead of the current American system where the different [\*352] types of energy sources and project sizes battle one another for the lowest bid**, the feed-in tariff system stimulates competition "among developers and manufacturers to reduce prices to maximize their welfare**." n264 **The result of such a market scheme is "less expensive renewable energy" n265 and the potential for less expensive electricity altogether. n266**

**Electricity sector is key**

**Mormann 11** (Felix, German JD and JSD from University of Passau School of law, as well as an LMM from UC BerkeleySchool of Law and is a research Fellow at Stanford’s Steyer Center for Energy Policy and Finance, writing for Economic Law Quarterly, “Requirements for a Renewables Revolution.” 05/02/11. http://www.boalt.org/elq/documents/elq38\_4\_03\_2012\_0808.pdf**)**

Renewable sources of energy are relevant not only to electricity generation but also to other sectors of the energy market, such as heat and transport. The latter especially features prominently in the public debate over ever stricter fuel-economy standards mandated by the U.S. Environmental Protection Agency (EPA).29 Notwithstanding the importance of renewable energy sources for heat and transport, this Article focuses on reducing greenhouse gas emissions as necessary to mitigate climate change through the timely transition to renewables in the electricity sector. From 1990 to 2008, **electricity generation accounted for 32 percent of all U.S. greenhouse gas emissions, placing the electricity sector at the top of the emitters’ list, ahead of the transport sector**, which is responsible for 27 percent of all U.S. greenhouse gas emissions.30 **Globally, the energy sector accounts for 73 percent of greenhouse gas emissions, with the agricultural sector assuming a distant second place responsible for 16 percent.31 With U.S. and global electricity generation expected to increase by 22 percent and 74 percent respectively until 2030,32 any effort to significantly reduce greenhouse gas emissions must include major reforms in the electricity sector. A timely shift to renewable sources is the only long-term sustainable solution** presently available.33 Moreover, the projected growth in electricity generation will easily be surpassed if the current trend towards electric vehicles (e.g., plug-in hybrids) continues.34 The resulting large-scale electrification of the transport sector would further increase the need for a timely decarbonization of the electricity sector. Otherwise greenhouse gas emissions may merely move from one sector (transport) to another, only slightly less carbon-intensive sector (electricity). While improvements in energy efficiency will also be important,35 the timely shift to renewables is essential if current efforts in climate change mitigation are to be successful.36 Fortunately, the case for rapid large-scale deployment of renewables in the electricity sector is not one of necessity only but of potential, too. In comparison to the fragmented structure of the heat-relevant building sector, for instance, the electricity sector is relatively centralized and, hence, easier to regulate and reform.37 Indeed, a recent study found that meeting the world’s entire demand with electricity generated from water, wind, and sunlight is technologically feasible as early as twenty years from today.38 Accordingly, this Article focuses on the use of renewables for the generation of electricity.

**Warming causes extinction - oceans**

**Sify 2010** – Sydney newspaper citing **Ove Hoegh-Guldberg, professor at University of Queensland and Director of the Global Change Institute, and John Bruno, associate professor of Marine Science at UNC** (Sify News, **“Could unbridled climate changes lead to human extinction?”,** <http://www.sify.com/news/could-unbridled-climate-changes-lead-to-human-extinction-news-international-kgtrOhdaahc.html>**, WEA)**

The findings of the comprehensive report: 'The impact of climate change on the world's marine ecosystems' emerged from a synthesis of recent research on the world's oceans, carried out by two of the world's leading marine scientists. One of the authors of the report is Ove Hoegh-Guldberg, professor at The University of Queensland and the director of its Global Change Institute (GCI). 'We may see sudden, unexpected changes that have serious ramifications for the overall well-being of humans, including the capacity of the planet to support people. This is further evidence that we are well on the way to the next great extinction event,' says Hoegh-Guldberg. 'The findings have enormous implications for mankind, particularly if the trend continues. The earth's ocean, which produces half of the oxygen we breathe and absorbs 30 per cent of human-generated carbon dioxide, is equivalent to its heart and lungs. This study shows worrying signs of ill-health. It's as if the earth has been smoking two packs of cigarettes a day!,' he added. 'We are entering a period in which the ocean services upon which humanity depends are undergoing massive change and in some cases beginning to fail', he added. The 'fundamental and comprehensive' changes to marine life identified in the report include rapidly warming and acidifying oceans, changes in water circulation and expansion of dead zones within the ocean depths. These are driving major changes in marine ecosystems: less abundant coral reefs, sea grasses and mangroves (important fish nurseries); fewer, smaller fish; a breakdown in food chains; changes in the distribution of marine life; and more frequent diseases and pests among marine organisms. Study co-author John F Bruno, associate professor in marine science at The University of North Carolina, says greenhouse gas emissions are modifying many physical and geochemical aspects of the planet's oceans, in ways 'unprecedented in nearly a million years'. 'This is causing fundamental and comprehensive changes to the way marine ecosystems function,' Bruno warned, according to a GCI release. These findings were published in Science

**DELIBERATIVE POLICYMAKING through DEBATE is the CRUCIAL internal link to solving warming through public policy and SUBSUMES their aff ¶**

**Herbeck and Isham 10¶**

<http://www.thesolutionsjournal.com/node/775>¶ Jon Isham¶ Associate Professor of Economics, Middlebury College ¶ In the fall of 1999, Jon joined the department of economics and the program in environmental studies at Middlebury College. Jon teaches classes in environmental economics, environmental policy, introductory microeconomics, social capital in Vermont, and global climate change. Jon is co-editing a new book, Ignition: The Birth of the Climate Movement; has co-edited Social Capital, Development, and the Environment (Edward Elgar Publications); has published articles (several forthcoming) in Economic Development and Cultural Change, The Journal of African Economies, The Nonprofit and Voluntary Sector Quarterly, The Quarterly Journal of Economics, Rural Sociology, Society and Natural Resources, The Southern Economic Journal, The Vermont Law Review, and the World Bank Economic Review; and has published book chapters in volumes from Ashgate Press, The New England University Press, Oxford University Press, and Cambridge University Press. His current research focuses on building the new climate movement; the demand for water among poor households in Cambodia; information asymmetries in low-income lending; and the effect of local social capital on environmental outcomes in Vermont.¶ Herbeck, member of the Rubenstein School of Environment and Natural Resources and the Honors College. ¶

Getting to **350 parts per million CO2** in the atmosphere **will require massive investments in clean-energy infrastructure**—investments **that** **can** too often **be foiled by** a combination of special interests and **political sclerosis.** Take the recent approval of the Cape Wind project by the U.S. Department of the Interior. In some ways, this was great news for clean-energy advocates: the project’s 130 turbines will produce, on average, 170 megawatts of electricity, almost 75 percent of the average electricity demand for Cape Cod and the islands of Martha’s Vineyard and Nantucket.1 But, because of local opposition by well-organized opponents, the approval process was lengthy, costly, and grueling —and all for a project that will produce only 0.04 percent of the total (forecasted) U.S. electricity demand in 2010.2,3 Over the next few decades, the world will need thousands of large-scale, low-carbon electricity projects—wind, solar, and nuclear power will certainly be in the mix. But if each faces Cape Wind–like opposition, getting to 350 is unlikely. **How can the decision-making process** about such projects **be streamlined so that public policy** **reflects** the view of **a well-informed majority**, **provides opportunities for legitimate critiques, but does not permit the** **opposition to retard** **the process indefinitely**? **One answer is found in** a set of innovative **policy-making tools founded on** the principle of **deliberative democracy**, defined as “decision making by discussion among free and equal citizens.”4 Such approaches, which have been developed and led by the Center for Deliberative Democracy (cdd.stanford.edu), America Speaks (www.americaspeaks.org), and the Consensus Building Institute (cbuilding.org), among others, are gaining popularity by promising a new foothold for effective citizen participation in the drive for a clean-energy future. Deliberative democracy stems from the belief that **democratic leadership should involve educating constituents** about issues at hand, and that **citizens may significantly alter their opinions when faced with information** about these issues. Advocates of the approach state that **democracy should shift away from fixed notions toward a learning process** **in which people develop defensible positions.**5 While the approaches of the Center for Deliberative Democracy, America Speaks, and the Consensus Building Institute do differ, **all of these deliberative methodologies involve unbiased sharing of information** **and public-policy alternatives** with a representative set of citizens; a **moderated** process of **deliberation among** the **selected citizens**; **and** the collection and **dissemination of data** resulting **from this process**. For example, in the deliberative polling approach used by the Center for Deliberative Democracy, a random selection of citizens is first polled on a particular issue. Then, members of the poll are invited to gather at a single place to discuss the issue. Participants receive balanced briefing materials to review before the gathering, and at the gathering they engage in dialogue with competing experts and political leaders based on questions they develop in small group discussions. After deliberations, the sample is asked the original poll questions, and the resulting changes in opinion represent the conclusions that the public would reach if everyone were given the opportunity to become more informed on pressing issues.6 If policymakers look at deliberative polls rather than traditional polls, they will be able to utilize results that originate from an informed group of citizens. As with traditional polls, deliberative polls choose people at random to represent U.S. demographics of age, education, gender, and so on. But traditional polls stop there, asking the random sample some brief, simple questions, typically online or over the phone. However, **participants** of deliberative polls have the opportunity to **access expert information and then talk with one another before voting on policy recommendations. The power of this approach is illustrated by the results of a global deliberative process** organized by **World Wide Views on Global Warming** (www.wwviews.org), a citizen’s deliberation organization based in Denmark.7 On September 26, 2009, approximately 4,000 people gathered in 38 countries to consider what should happen at the UN climate change negotiations in Copenhagen (338 Americans met in five major cities). **The results** derived from this day of deliberation **were dramatic** **and significantly different** **from results of traditional polls**. Overall, citizens showed strong concern about global warming and support for climate-change legislation, contrary to the outcomes of many standard climate-change polls. Based on the polling results from these gatherings, 90 percent of global citizens believe that it is urgent for the UN negotiations to produce a new climate change agreement; 88 percent of global citizens (82 percent of U.S. citizens) favor holding global warming to within 2 degrees Celsius of pre-industrial levels; and 74 percent of global citizens (69 percent of U.S. citizens) favor increasing fossil-fuel prices in developed countries. However, a typical news poll that was conducted two days before 350.org’s International Day of Climate Action on October 24, 2009, found that Americans had an overall declining concern about global warming.7 How can **deliberative democracy** help to **create solutions for the climate-change policy process**, to accelerate the kinds of policies and public investments that are so crucial to getting the world on a path to 350? Take again the example of wind in the United States. In the mid-1990s, the Texas Public Utilities Commission (PUC) launched an “integrated resource plan” to develop long-term strategies for energy production, particularly electricity.8 Upon learning about the deliberative polling approach of James Fishkin (then at the University of Texas at Austin), the PUC set up deliberative sessions for several hundred customers in the vicinity of every major utility provider in the state. The results were a surprise: it turned out that participants ranked reliability and stability of electricity supply as more important characteristics than price. In addition, they were open to supporting renewable energy, even if the costs slightly exceeded fossil-fuel sources. Observers considered this a breakthrough: based on these public deliberations, the PUC went on to champion an aggressive renewable portfolio standard, and the state has subsequently experienced little of the opposition to wind-tower siting that has slowed development in other states.8 By 2009, Texas had 9,500 megawatts of installed wind capacity, as much as the next six states (ranked by wind capacity) in the windy lower and upper Midwest (Iowa, Minnesota, Colorado, North Dakota, Kansas, and New Mexico).9 **Deliberative democracy has proven effective in a wide range** **of countries and settings.** In the Chinese township of Zeguo, a series of deliberative polls has helped the Local People’s Congress (LPC) to become a more effective decision-making body.10 In February 2008, 175 citizens were randomly selected to scrutinize the town’s budget—and 60 deputies from the LPC observed the process. After the deliberations, support decreased for budgeting for national defense projects, while support rose for infrastructure (e.g., rural road construction) and environmental protection. Subsequently, the LPC increased support for environmental projects by 9 percent.10 In decades to come, China must be at the forefront of the world’s investments in clean-energy infrastructure. The experience of Zeguo, if scaled up and fully supported by Chinese leaders, can help to play an important role. **Deliberative democracy offers one solution for determining citizen opinions**, including those on pressing issues **related to climate change and clean energy.**

**Environmental injustices are perpetuated by an imbalance in energy externalities—a green urban grid is the only alternative**

**Behles 12.** (Deborah, Associate Professor of Law and Clinical Staff Attorney, Environmental Law and Justice Clinic, Golden Gate University School of Law. William and Mary Environmental Law and Policy Review. “An Integrated Green Urban Electrical Grid.” Spring 2012. 36 Wm. & Mary Envtl. L. & Pol'y Rev. 671 Lexis.)

The New Green Grid Can Reduce Pollution and Provide Economic Development in Environmental Justice Neighborhoods n177 **An integrated urban grid focused on local renewable resources such as solar panels and wind turbines will also have positive public health impacts due to the reduced reliance on fossil-fuel energy.** In fact, in an optimal situation, an integrated urban grid can end reliance on burning fossil-fuel because the resources do not use fossil-fuel and the energy storage helps eliminate the need for fossil- fuel facilities to act as a backup. n178 **This reduced reliance on fossil- fuel electricity generation decreases greenhouse gases and other harmful co- pollutant**s such as sulfur dioxide, nitrous oxides, and particulate matter. n179 **These co-pollutant emissions have been consistently linked to adverse cardiovascular and respiratory effects including asthma and premature death**. n180 Consequently, a **reduction of these co-pollutants decreases these health risks**. Although reliance on solar and wind power generally results in positive public health benefits, not all renewable energy resources have the same beneficial impact on public health. For example, many states allow combustion of biomass and municipal waste to qualify as renewable energy. n181 **Burning these resources does not necessarily reduce the** [\*699] **quantity of harmful pollutants released into the air.** n182 In addition, **the greenhouse impact of the combustion of biomass and municipal waste has recently come under scrutiny, leading one state to reevaluate whether biomass should count as a renewable resource**. n183 Due to these potential issues, the green urban grid should rely primarily on clean renewable resources such as solar, wind, geothermal, and small hydro to meet its generation needs. **Reliance on these types of resources can reduce air pollution** including greenhouse gases. **These reductions, if planned correctly, can help communities currently overburdened by pollution. Numerous studies have shown that low-income and minority communities that often live in urban areas bear more of the cumulative burden of pollution**. n184 **In particular, minority and low-income communities disproportionately bear the adverse environmental and health impacts from fossil-fuel exploration, extraction, production, consumption, and disposal**. n185 **These activities produce and lead to several criteria pollutants** including fine particulate matter and nitrous oxides, n186 **which could be reduced by increased reliance on the green urban grid.** For example, in the San Francisco Bay Area, the Bay Area Air Quality Management District has designated urban neighborhoods with high populations of minorities, such as Bayview Hunters Point and Richmond, as high impact areas for air pollution. n187

**FITS solves 2 ways:**

**Distributed Generation**

**Mendonça et al 9**

(Miguel Mendonça. Researcher, author and advocate of sustainability and resilience strategies. David Jacobs is a researcher and PhD candidate at the Environmental Policy Research Centre in Berlin (FFU) focusing on support mechanisms for renewable electricity. Dr. Benjamin K. Sovacool is an Assistant Professor at the Lee Kuan Yew School of Public Policy at the National University of Singapore. He is also a Research Fellow in the Energy Governance Program at the Centre on Asia and Globalization. **(Powering the Green Economy: The Feed-in Tariff Handbook, p. 112-8))**

**To penalize renewables for** their **variability or intermittency** not only **ignores how that variability can be mitigated, it** also **obscures equal amounts of variability inherent in conventional fossil fuel and nuclear resources**. **All electricity systems** must respond to the complex interplay of constantly changing supply and demand. They **are subject to unexpected failures and outages** and influenced by a large number of planned and unplanned events. Daily load variances occur, as routine practices reinforce the effects of changing from day to night, such as turning lights on, raising indoor temperature when waking up, taking showers before breakfast, cooking in the dinner hour and washing dishes, or charging electric vehicles at night. Over the course of a week, energy use changes as the weekend approaches and, throughout the year, as seasonal differences in temperature and climate occur. While it is certainly true that the output from conventional power plants can be measured quite accurately, researchers from the Lawrence Berkeley National Laboratory and the American Council for an Energy-Efficient Economy noted that virtually ‘every other aspect of planning for and implementing that resource is riddled with uncertainty’ (Vine et al, 2007). Four types of uncertainty are most common: unexpected outages, variance in construction costs, variance in demand forecasts, and transmission and distribution vulnerability. And, perhaps surprisingly, renewable power plants address each of these types of variability better than conventional units: 1 Let us begin by discussing the unplanned outages for conventional units. The average coal plant operating on the market today is out of service 10– 15 per cent of the time (Sovacool, 2009). Looking at the performance of conventional generators in the US from 2000 to 2004, the North American Electric Reliability Corporation found that plants shut down for scheduled maintenance 6.5 per cent of the year and require unscheduled maintenance or experience forced outages another 6 per cent of the year. Their study noted that conventional output is guaranteed on average only 87.5 per cent of the time in the US, with a range of 79–92 per cent (NERC, 2005). To cope with the variability of conventional units, system operators must operate a 15 per cent reserve margin of extra capacity, much of which is continually fuelled and spinning ready for instant use. Nuclear plants are not much better. One survey of nuclear power plant operating performance for US, French, Belgian, German, Swedish and Swiss reactors found mean durations of continual operation from 35 to 88 days (Perin, 1998). In other words, the average plant only operated one to three months without some sort of unplanned outage event, half of which were related to equipment failure. Of all 132 nuclear power plants built in the US (only 52 per cent of the 253 originally planned), almost one-quarter (21 per cent) were permanently and prematurely closed due to reliability or cost problems, and 27 more have failed for a year or more at least once (Lovins et al, 2008). Even reliably operating nuclear plants must shut down 39 days every 17 months for refuelling and scheduled maintenance. They must also shut down during blackouts, and then take incredibly long times to restart. During the August 2003 blackout in the US, nine perfectly operating nuclear plants had to shut down and then took 12 days to restart. During the first three days, when they were most needed, their output was below 3 per cent (Lovins et al, 2008). Regions heavily dependent on a fleet of nuclear plants are at greater risk because drought or safety problems can close many units simultaneously. 2 Conventional plants are more prone to cost overruns and manufacturing glitches. These power plants are ‘lumpy systems’ in the sense that additions are made in large ‘lumps’ (such as 1000MW reactors). These facilities have long lead times, making them vulnerable to project delays, unforeseen events, cost overruns and project cancellations. Nuclear power plants in Canada, the US and Finland are a prime example here. In Canada, delays and cost overruns on nuclear power plants accounted for CA$15 billion of ‘stranded debt’ created by Ontario Hydro (Winfield et al, 2006). In the US, the actual construction cost for 75 nuclear power plants was quoted to be US$89.1 billion, but because of project delays and manufacturing errors, cost overruns ballooned to more than three times as much, at US$283.8 billion (US Congressional Budget Office, 2008). The Finnish nuclear power plant at Olkiluoto was expected to cost €3 billion. By now the costs have risen to at least €4.5 billion and the power plant which was to be completed by 2009 will not go online before mid-2012. 3 Gargantuan conventional plants, because they take longer to build, are also at greater risk of unexpected changes in electricity demand over long periods of time. We have a hard enough time predicting the weather or the outcome of political elections; imagine the difficulty of projecting how an entire sector will demand electricity five, ten, or even twenty years from now. In the 1970s and 1980s, excessively high forecasts of growth in demand for electricity led to overbuilding of generating plants and massive electric system cost overruns in many states. One infamous example was in Washington State, where the Washington Public Power Supply spent more than $5 billion partially constructing nuclear plants that were later abandoned when demand for electricity dropped. Between 1972 and 1984, more than $20 billion in construction payments flowed into 115 nuclear power plants worldwide that were subsequently abandoned by their sponsors because they were no longer needed (Cavanagh, 1986). 4 Both sets of large plants, fossil fuelled and nuclear, must rely on brittle transmission lines easily disrupted by lightning strikes, storms, squirrels and bullets. Given that more than 98 per cent of blackouts and power outages start on the grid, **such centralization has grave risks for electricity reliability** (Lovins et al, 2008). The **renewable resources supported by FITs**, ironically, **respond better to each of these problems**. **Modern wind turbines and solar panels have a technical reliability above 97 per cent**. Such high reliability is for one wind turbine or solar panel, so any amount of significant wind or solar power in an electricity system would never see all (hundreds of thousands of units) down at the same time. When individual units do rarely fail, they do so in smaller increments. The high technical reliability for wind and solar lowers the probability of unplanned outages and lessens the need for operational and capacity reserves (Jacobson and Masters, 2001). Since forced outages for conventional units range from 10 to 15 per cent, and the wind turbine failure rate is less than 3 per cent, the extent that wind replaces fossil fuels improves the reliability of the system by 7–12 per cent (and also reduces backup requirements by an equivalent amount). **New inverter technology has the potential to enhance the reliability of solar even further**, **as it will enable systems to work when partially shaded**. In terms of modularity, construction cost overruns, and rapid alterations in electricity demand, **the quicker lead times for renewable power plants and small- scale units enables a more accurate response to load growth or reduction.** Wind farms, geothermal power plants, and biomass plants often take between one and two years to construct, and if the units are available, solar panels can be installed in as little as a few months. Small-scale solar and wind units can be matched to serve almost any load, and medium- to commercial-scale wind turbines, bioelectric plants and geothermal stations can be installed in increments ranging from 1.5MW to 20MW. Such modularity minimizes the financial risk associated with borrowing hundreds of millions of dollars to finance plants for ten or more years before they start producing a single kWh of electricity, and it means electricity loads can be precisely matched. Finally, in terms of transmission and distribution vulnerability, the **small-scale and distributed renewable power generators promoted by FITs can improve grid reliability, lessen the need to build expensive transmission infrastructure, reduce congestion, offer important ancillary services, and improve energy security through geographic diversification**. **Deploying distributed solar**, biomass **and small-scale wind units offers an effective alternative to constructing new transmission and distribution lines**, transformers, local taps, feeders and switchgears, especially in congested areas or regions where the permitting of new transmission networks is difficult. The Pacific Gas and Electric Company, the largest investor-owned utility in California, built an entire power plant in 1993 to test the grid benefits of a 500kW distributed solar power plant. The utility found that the distributed solar plant improved voltage support, minimized power losses, lowered operating temperatures for transformers on the grid, and improved transmission capacity. The benefits were so large that the small-scale generator was twice as valuable as estimated, with projected benefits of $0.14–0.2/kWh (Wenger et al, 1994). This could be why the Institute of Electrical and Electronics Engineers in the US recently concluded that **dispersed renewable resources** such as wind can be **managed not only through interconnection and integration without degrading the network, they can also contribute to improvements in system performance** (Smith et al, 2007). THE RELIABILITY OF HYDRO, GEOTHERMAL, SOLAR THERMAL AND BIOMASS Commercial hydroelectric, geothermal, bioelectric and biogas power plants provide predictable, 24-hour base-load power in many parts of the world, including the US (where they satisfy more than 7 per cent of national electricity demand). Other countries, like Norway, rely entirely on these technologies. Equally, the latest solar thermal power plants can now provide reliable electricity as they operate in combination with molten salt and other large storage units. These power facilities provide reliable power without the need for backup. Many of these systems are subject to woeful underinvestment, yet both hydropower and geothermal plants could provide almost the entire world’s electricity by themselves if their technical potential was fully tapped. The world consumed about 17,000TWh of electricity in 2007, yet a comprehensive study undertaken by the International Energy Agency and others identified 14,370TWh of achievable remaining potential for hydroelectric facilities (International Hydropower Association, 2000) Similarly, the International Geothermal Association surveyed a collection of studies and concluded that 22,400TWh of geothermal power potential existed (Bertani, 2002). It is always good to remember that when we are talking about the types of technologies that FITs promote, we are not talking only about intermittent resources such as wind and solar PV. We are also talking about big and small hydroelectric dams, solar thermal and geothermal plants, and bioelectric stations (some combusting fuel and others harvesting methane from landfills) that have been proven through decades of experience to operate identically to coal, oil, natural gas and nuclear units. THE RELIABILITY OF INTERCONNECTED WIND AND SOLAR **While wind and solar systems are more variable than their** hydro, geothermal, solar thermal and biomass counterparts**, interconnecting dispersed wind and solar units greatly improves their reliability**. Electrical and power systems engineers have long held the principle that the larger a system becomes, the less reserve capacity it needs. Demand variations between individual consumers are mitigated by grid interconnection in exactly this manner and modern communication technology enables us to make this happen. When a single electricity consumer starts drawing more electricity than the system has allocated for each consumer, the strain on the system is insignificant because so many consumers are drawing from the grid that it is entirely likely another consumer will be drawing less to make up the difference (International Energy Agency, 2005). This ‘averaging’ works in a similar fashion on the supply side of the grid**. Individual wind turbines and solar panels average each other out in electricity supply. When the wind is not blowing through one wind farm or the sun not shining on someone’s house, it is likely to be blowing harder or shining brighter near another**. Therefore, the improvement of interconnection capacity between countries and regions is of special importance for renewable energy sources. Besides, modern, large-scale wind power plants are often remote-controlled by grid operators in order to increase or reduce electricity output according to demand (see Section 3.5). A large number of meteorological wind studies make this point forcefully. Scientists looking at a 3-year data set for Scandinavian countries from 2000 to 2002 noted that that longest duration in low wind speeds per year was 58 hours for Denmark, 19 hours for Finland and Sweden, and 9 hours for Norway. However, none of these four rare events occurred at the same time, meaning there were no totally calm periods for all four countries together (Gul and Stenzel, 2006, p173). A separate study looking at Denmark and Germany found that the maximum hourly swing in wind speeds over a distributed network of wind farms rarely exceeded 20 per cent and had a standard deviation of hourly swings of 3 per cent. The study calculated that the maximum measured change in output per minute for a massive 2400MW wind farm would be less than 6MW, or 0.25 per cent of its total output (Gul and Stenzel, 2006, p171). Similarly, hourly wind data collected over a 23-year period from 66 different locations in the UK found that low wind speed events affecting more than half the country were very rare. For less than 10 per cent of the total time were wind speeds below 4 metres per second at individual sites, and there was no single event over the entire 23 years where wind speeds were low throughout all of the locations (Olz et al, 2007, p30). The conclusions advanced by these scientific studies are only bolstered by real-world operating experience in the US, Germany, Canada and the EU. In the US, one study of utility experience with wind farms spread across locations in Minnesota, California, Wisconsin, New York, Oregon, Wyoming and Colorado found that greater penetration of wind plants helped grid operators handle major outages and contingencies elsewhere in the electricity network (DeMeo et al, 2005). Another assessment of 19 wind sites in the central US noted that almost all parameters from wind power improved as the number of interconnected sites increased, including standard deviations of array-average wind speed and wind power, reliability, and the need for energy storage or reserve capacity (Archer and Jacobson, 2007). A third study performed by General Electric for the Independent System Operator in New York investigated a 10 per cent wind penetration scenario in New York State, or the addition of about 3300MW of installed wind capacity on a 33,000MW peak-load system. When researchers posited that the wind capacity was located across 30 different sites, they found ‘no credible single contingency’ that led to a significant loss of generation. Because the system in New York was already designed to handle a loss of 1200MW due to the unreliability of conventional generators, it had more than enough resiliency to enable the incorporation of wind (Piwko et al, 2005). This could be why even though the US has more than 25,000MW of installed wind capacity (the largest absolute amount in the world), not a single conventional unit has been installed as a backup generator. In Germany, the hundreds of thousands of dispersed solar photovoltaic units do not overwhelm system operators nor do they need highly advanced grids. Using a transmission and distribution system similar to the US, Germany integrates 350,000 separate solar installations (90 per cent of which are on residences) to provide 3.5GW of peak capacity. The highly dispersed and distributed nature of this resource means that when the sun shines in one area it often cancels out cloudiness in others, making it easier to manage. The German Solar Industry Association believes that solar penetration could be ramped up ten times to 35GW without any inherent technical problems.3 Moreover, grid operators have proven that they can merely issue grid codes for the different voltage levels of the grid to increase network stability when needed. In Canada, a study in Ontario investigated the impact of 20 per cent wind penetration on its electricity grid. The assessment accounted for seasonal wind and load patterns, daily wind and load patterns, changing capacity value for delivering power during peak load, and geographic diversity. It used wind and load data for one year and concluded that the more wind that existed in the system and the more geographically dispersed it was, the more it reduced volatility, in some cases by up to 70 per cent (AWS TrueWind, 2005). Last, another study looked at the wind portfolios of all major power providers in the EU and found that a large contribution of wind was technically and economically feasible. The study noted that the more wind farms are interconnected, the more performance of wind turbines increases (and the costs of their electricity decreases). The study also found that extremely large shares of wind could be realized without compromising the security of the existing transmission and distribution system (European Wind Energy Association, 2005). When researchers ollowed up on their results with thousands of additional simulations in 2008 and 2009, they found that cross-border transmission of electricity from interconnected wind farms distributed across the EU would not negatively affect reliability. No single weather event or accident occurred that would affect wind farms in all or even most countries at the same time. Furthermore, they found that the effect of aggregating electricity from wind farms across multiple countries more than doubled the capacity factor of those interconnected wind turbines (Trade Wind, 2009). These studies, in other words, conclusively show that widespread use of FITs would not compromise the stability of the electricity grid by incentivizing people to connect ‘too many’ renewables. The more FITs encourage the adoption of wind and solar, the more stable the grid becomes, rather than the other way around.

**Energy Storage technology**

**Behles 12.** (Deborah, Associate Professor of Law and Clinical Staff Attorney, Environmental Law and Justice Clinic, Golden Gate University School of Law. William and Mary Environmental Law and Policy Review. “An Integrated Green Urban Electrical Grid.” Spring 2012. 36 Wm. & Mary Envtl. L. & Pol'y Rev. 671 Lexis.)

To provide an economic incentive to overcome the barrier of the initial capital cost, various states and countries have implemented regulatory programs that provide predictable revenue for sales of energy generated from a distributed generation resource. **The most widely used** [\*707] **mechanism is** called **a feed-in tariff**. n224 Feed-in tariffs are payments for electricity generated by a renewable resource. n225 The concept is a relatively simple one: guarantee compensation, generally in the form of long-term contracts, for renewable energy that is generated and delivered to the grid. n226 **Feed-in tariffs can help assure small energy generators dependable compensation for electricity generated, and allow small generators to compete with larger generators**. n227 Feed-in tariffs have been adopted throughout many different countries and states. n228 **Many of these feed-in tariffs have been successful at encouraging development of distributed generation.** n229 For instance, Germany's reliance on feed-in tariffs both encouraged the deployment of significant amounts of solar photovoltaic resources and kept energy costs reasonable. n230 **Due to this success, commentators consistently recommend feed-in tariffs as the "most effective policy instruments in overcoming the cost barriers to introducing renewable energy and making it economically viable."** n231 [\*708] **The success of a feed-in tariff is highly dependent on regulatory certaint**y and the price of the tariff. n232 **A community transitioning to the green urban grid should develop a targeted feed-in tariff to encourage development of the distributed generation** identified in the integrated planning exercise. In addition, **the concept of feed-in tariffs could also be useful for encouraging other types of resources on the new urban green grid such as energy storage**. n233

### K

#### The aff is an example of passive equality – providing emancipatory potential through solar rather than accepting the inherent equality as a starting point

Hemel, university of Amsterdam, 2008 (Hemel, Ernst van den, "Included but not Belonging. Badiou and Ranciere on Human Rights" Krisis 2008, issue 3)

For Badiou, the project of universal human rights is inherently incapable of accommodating truth. In fact, the very notion of human rights is part of an attempt of a dominant structure to be able to account for all ele-ments of a set, a quasi-totality. The result of this attempt can only be repe-tition of the dominant ideology: ‘The refrain of “human rights” is nothing other than the ideology of modern liberal capitalism: We won't massacre you, we won't torture you in caves, so keep quiet and worship the golden calf. As for those who don’t want to worship it, or who don’t believe in our superiority, there’s always the American army and its European minions to make them be quiet.’ (Badiou, 2001/2002) From the mathematical foundation of his theory, Badiou argues that the only universality is that which escapes structuring and which becomes apparent through the apparition of an event. Truth resists placing, it’s that which ‘makes a hole in knowledge’ (Badiou 1999: 80). The only uni-versal that Badiou’s theory allows is the appearance of an event, which forces us to recognize that every situation is not countable, but infinite. Human rights, with their fixed loci of universality, like freedom, or equal-ity, equate universality with a finite, western ideology. Thus this universal in fact can only recreate the existing power-situation. The only universal human right that Badiou allows is that of adhering to the infinite: ‘The latent violence, the presumptuous arrogance inherent in the cur-rently prevalent conception of human rights derives from the fact that these are actually the rights of finitude […]. By way of contrast, the even-tal conception of universal singularities requires that human rights be thought of as the rights of the infinite.’ (Badiou 2004: 4) Since any attempt to codify the situation along the lines of a prefixed uni-versality amounts to a repetition of what is already there, the project of universal human rights can only amount to a repetition of what is already counted, what is already perceived. What one should judge a situation by is not the prefixed codified universality, nor is it just the critique of perva-sive power structures. Instead, through the apparition of an event, one should focus on that which is included but doesn’t belong, and militantly claim its recognition. Also for Badiou, as we have seen with Rancière, the idea that the juridical sphere could provide means to accommodate truth is rather bleak. Since for Badiou the act of truly doing politics is limited to adhering militantly to an event, and since this event is by no means pre-dictable, the practice of trying to determine the parameters for justice is impossible. It is in this sense that Badiou defines ‘justice’ as something that resists codification: ‘“[J]ustice” cannot be […] a State programme. “Justice” is the qualification of an egalitarian moment of politics in actu. The trouble with most doctrines of justice is their will to define what it is, followed by attempts to realise it. But justice, which is the philosophical name for the egalitarian political maxim, cannot be defined. For equality is not an objective of action, it is its axiom. There is no politics bound to truth without the affirmation – an affirmation which can neither be proved nor guaranteed – of a universal capacity for political truth. Where truth is concerned, thought cannot adhere to the scholastic path of definitions.’ (Badiou, 2005: 99) Juridical practice can only be seen as either irrelevant to truth, in the sense that a juridical prescription can only cater to the already-known, or as subordinate to truth, in the sense that a truth can give inspiration to a new law, as for example the Constitution. But in either case, there is no prediction possible about what form or effect the truth is going to create. Badiou’s writings on human rights are therefore geared more towards answering the question that Agamben disclosed, ‘what are the conditions of possibility for radically new politics?’ than towards the improvement of the juridical sphere. The practice of laws and institutions like the Human Rights Council is, for Badiou, part and parcel of the sphere of belonging. And politics can be defined by exactly that which breaks open the sphere of belonging, by adhering to that which is included that doesn’t belong.

#### Passive equality recreates exclusion in politics--only by decoupling politics from valuation of citizens or immigrants can we confront the current violent order.

Balibar, ‘4 (Professor of Philosophy, Etienne, We, The People of Europe?, p.125-30)

In such conditions, we can incline toward divergent conclusions. Either we can think that the multifaceted phenomenon of mass violence and extreme violence has generally replaced politics, including internal and external relationships of forces among states, or we fully take into account the fact that the fields of politics and violence—a violence that seems to lack rational organization, not excepting self-destruction—are **no longer separated**. They have progressively permeated one another. It is precisely in such conditions that something called “humanitarian action” or “intervention,” both “private” and “public,” has become the necessary supplement of politics. I cannot discuss all the aspects of this mutation, but I would like briefly to address three questions that seem to me to have an importance for the concept of politics itself. Are We Facing an “Unprecedented” Spread of Extreme Violence (or Violence of the Extremes)? I should like to be very careful on this point, which raises a number of discussions ranging from the issue of “old and new wars” to the highly sensitive moral questions of why and how to “compare genocides” in history. Perhaps what is unprecedented is basically the new visibility of extreme violence, particularly in the sense that modern techniques of media coverage and broadcasting and the transformation of images—in the end, as we could see for the first time on a grand scale during the Gulf War, of the production of “virtual reality”—transform extreme violence into a show, and display this show simultaneously before a world audience. We also know that the effect of such techniques is, at the same time, to uncover some violent processes, or scenes of horror (truly horrifying, such as hundreds of mutilated children in Angola or Sierra Leone), and to cover up others (equally horrifying, such as babies starving in Baghdad). We suspect that powerful ideological biases are at work when the coverage of extreme violence gives credit to such simplistic ideas as the political transition from the “equilibrium of terror” during the Cold War to the “competition among victims,” by way of the undifferentiated uses of the legal and moral but hardly political notion of “crimes against humanity.” In the end, we become aware of the fact that talking about and showing the images of everyday horror produces, particularly in the relatively wealthy and protected regions of humanity, a very ambivalent effect: raising compassion but also disgust, reinforcing the idea that humankind as such is really divided into qualitatively different cultures or civilization, which, according to one political scientist, could only produce a “clash” among them. I am aware of all these difficulties, but I would maintain that a reality lies behind the notion of something “unprecedented.” Perhaps it is simply the fact that a number of heterogeneous methods or processes of extermination (by which I mean eliminating masses of individuals inasmuch as they belong to objective or subjective groups) have themselves **become “globalized**,” that is, operate in a similar manner everywhere in the world at the same time, and so **progressively form a “chain**,” giving full reality to what E.P. Thompson anticipated twenty years ago with the name “exterminism.” In this series of connected processes, we must include, precisely because they are heterogeneous—they do not have one and the same “cause,” but they produce cumulative effects:1. **Wars** (both “civil” and “foreign,” a distinction that is not easy to draw in many cases, such as Yugoslavia or Chechnya).2. Communal rioting, with ethnic and/or religious **ideologies of “cleansing**.”3. Famines and other kinds of “absolute” poverty produced by the ruin of traditional or nontraditional economies.4. Seemingly “natural” catastrophes, which in fact are killing on a mass scale because they are overdetermined by social, economic, and political structures, such as pandemics (for example, the difference in the distribution of AIDS and the possibilities of treatment between Europe and North America on the one side, Africa and some parts of Asia on the other), drought, floods, or earthquakes in the absence of developed civil protection. In the end it would be my suggestion that the “globalization” of various kinds of extreme violence has produced a growing division of the “globalized world” into **life zones and death zones**. Between these zones (which indeed are intricate and frequently reproduced within the boundaries of a single country or city) there exists a decisive and fragile superborder, which raises fears and concerns about the unity and division of mankind—something like a global and local “enmity line,” like the “amity line” that existed in the beginning of the modern European seizure of the world. It is this superborder, this enmity line, that becomes at the same time an object of permanent show and a hot place for intervention but also for nonintervention. We might discuss whether the most worrying aspect of present international politics is “humanitarian intervention” or “generalized nonintervention,” or one coming after the other. Should We Consider Extreme Violence to be “Rational” or “Functional” from the Point of View of Market Capitalism (the “Liberal Economy”)? This is a very difficult question—in fact, I think it is the most difficult question—but it cannot be avoided; hence it is also the most intellectually challenging. Again, we should warn against the paralogism that is only too obvious but nonetheless frequent: that of mistaking consequences for goals or purposes. (But is it really possible to discuss social systems in terms of purposes? On the other hand, can we avoid reflecting on the immanent ends, or “logic,” or a structure such as capitalism?) It seems to me, very schematically, that the difficulty arises from the two opposite “global effects” that derive from the emergence of a chain of mass violence—as compared, for example, with what Marx called primitive accumulation when he described the creation of the preconditions for capitalist accumulation in terms of the violent suppression of the poor. One kind of effect is simply to generalize material and moral insecurity for millions of potential workers, that is, to induce a massive proletarianization or reproletarianization (a new phase of proletarianization that crucially involves a return of many to the proletarian condition from which they had more or less escaped, given that insecurity is precisely the heart of the “proletarian condition”). This process is contemporary with an **increased mobility of capital** and also **humans**, and so it takes place across borders. But, seen historically, it can also be distributed among several political varieties:1. In the “North,” it involves a partial or deep dismantling of the social policies and the institutions of social citizenship created by the welfare state, what I called the “national social citizenship,” and therefore also a violent transition from welfare to workfare, from the social state to the penal state (the United States showing the way in this respect, as was convincingly argued in a recent essay by Loic Wacquant).2. In the “South,” it involves destroying and inverting the “developmental” programs and policies, which admittedly did not suffice to produce the desired “takeoff” but indicated a way to resist impoverishment.3. In the “semiperiphery,” to borrow Immanuel Wallerstein’s category, it was connected with the collapse of dictatorial structure called “real existing socialism,” which was based on scarcity and corruption, but again kept the polarization of riches and poverty within certain limits. Let me suggest that a common formal feature of all these processes resulting in the reproletarianization of the labor force is the fact that they suppress or minimize **the forms and possibilities of representation** of the subaltern **within the state apparatus itself**, or, if you prefer, the possibilities of more or less effective counterpower. With this remark I want to emphasize the political aspect of processes that, in the first instance, seem to be mainly “economic.” This political aspect, I think, is even more decisive when we turn to the other scene, the other kind of result produced by massive violence, although the mechanism here is extremely mysterious. Mysterious but real, unquestionably. I am thinking of a much more destructive tendency, destructive not of welfare or traditional ways of life, but of the social bond itself and, in the end, of “bare life.” Let us think of Michel Foucault, who used to oppose two kinds of politics: “Let live” and “let die.” In the face of the cumulative effects of different forms of extreme violence or cruelty that are displayed in what I called the “death zones” of humanity, we are led to admit that the current mode of production and reproduction has become a mode of production for elimination, a reproduction of populations that are not likely to be productively used or exploited but are always already superfluous, and therefore can be only eliminated either through “political” or “natural” means—what Latin American sociologists provocatively call poblacion chatarra, “garbage humans,” to be “thrown” way out of the global city. If this is the case, the question arises once again: what is the rationality of that? Or do we face an absolute triumph of irrationality. My suggestion would be: it is economically irrational (because it amounts to a limitation of the scale of accumulation), but it is politically rational—or, better said, it can be interpreted in political terms. The fact is that history does not move simply in a circle, the circular pattern of successive phases of accumulation. Economic and political class struggles have already taken place in the nineteenth and twentieth centuries with the result of limiting the possibilities of exploitation, creating a balance of forces, and this event remains, so to speak, in the “memory” of the system. The system (and probably also some of its theoreticians and politicians) “knows” that there is no exploitation without class struggles, no class struggles without organization and representation of the exploited, no representation and organization without a tendency toward political and social citizenship. This is precisely **what current capitalism cannot afford**: there is no possibility of a “global social state” corresponding to the “national social states” in some parts of the world during the last century. I mean, there is no political possibility. Therefore there is political resistance, very violent indeed, to every move in that direction. Technological revolutions provide a positive but insufficient condition for the deproletarianization of the actual or potential labor force. This time, direct political repression may also be insufficient. Elimination or extermination has to take place, “passive” if possible, “active” if necessary; mutual elimination is “best,” but it has to be encouraged from outside. This is what allows me to suggest (and it already takes me to my third question) that if the “economy of global violence” is not functional (because its immanent goals are indeed contradictory), it remains in a sense teleological: the same populations are massively targeted (or the reverse: those populations that are targeted become progressively assimilated, they look “the same”). They are qualitatively “deterritorialized,” as Gilles Deleuze would say, in an intensive rather than extensive sense: they “live” on the edge of the city under the permanent threat of elimination; but also, conversely, they live and are perceived as “nomads,” even when they are fixed in their homelands, that is, their mere existence, their quantity, their movements, their **virtual claims of rights and citizenship** are perceived as a **threat for “civilization.”**In the End, Does “Extreme Violence” Form a Global System”? Violence can be highly “unpolitical”—this is what I wanted to suggest—but still form a system or be considered “systematic” if its various forms reinforce each other, if they contribute to creating the conditions for their succession and encroachment, if in the end they build a chain of “human(itarian) catastrophies” where actions to prevent the spread of cruelty and extermination, or simply limit their effects, are systematically obstructed. This teleology without an end is exactly what I suggested calling, in the most objective manner, “preventative counterrevolution” or, better perhaps, “preventative counterinsurrection.” It is only seemingly “Hobbesian,” since the weapon used against a “war of all against all” is another kind of war (Le Monde recently spoke about Colombia in terms of “a war against society” waged by the state and the Mafiosi together). It is politics as antipolitics, but it appears as a system because of the many connections between the heterogeneous forms of violence (arms trade indispensable to state budgets with corruption; corruption with criminality; drugs, organ, and modern slave trade with dictatorships; dictatorships with civil wars and terror); and perhaps also, last but not least, because there is a politics of extreme violence that confuses all the forms to erect the figure of “evil” (humanitarian intervention sometimes participates in that) and because there is an economics of extreme violence, which makes both coverage and intervention sources of profitable business. I spoke of a division between zones of life and zones of death, with a fragile line of demarcation. It was tantamount to speaking of the “totalitarian” aspects of globalization. But globalization is clearly not only that. At the moment at which humankind becomes economically and, to some extent, culturally “**united**,” it is **violently divided “biopolitically**.” A **politics of civility** (or a politics of human rights) can be either the **imaginary substitute** of the destroyed unity, or the **set of initiatives that reintroduce everywhere,** and particularly on the borderlines themselves, **the issue of equality**, the **horizon of political action.**

#### Vote neg to celebrate the political subjectivity of the excluded by energy-- paradoxical exclusion from the policing of democracy and inclusion in the market offers a unique site of universalization against the neoliberal order.

Swyngedouw,'8 (School of Environment & Development -- University of Manchester, March, www.socialsciences.manchester.ac.uk/disciplines/politics/research/hmrg/activities/documents/Swyngedouw.pdf)

Of course, the current neo-liberal police order has already substantially eroded these democratic gains while traversing the symbolic order, one that now sees these demands again as scandalous and impossible. These are today among the key arenas where the principle of freedom and equality is perverted and undermined, where the scandal of democracy erupts most violently. Another example of such political sequence erupted when, in 1981, Solidarnosc’s demands for better working conditions on the Gdansk shipyards translated into the universal demands for political rights against the oligarchic bureaucratic order of state capitalism and their apparatchiks in Poland; when the latter acknowledged the demands of the activists, their police order’s symbolic edifice and constituted order crumbled and revealed the empty locus of power. They launched a proper political sequence that would overturn the symbolic order and the distribution of functions and places associated with it. Or when civil society groups took to the streets of East Germany and demanded different rights, it started a sequence that would transform existing authoritarian state forms. Their subsequent history of course also signaled their accelerated incorporation into a post-political European order as the opened dissensual political space soon closed down again. It is the sort of demand expressed when illegal and other immigrants in Europe or the US claim that ‘**we are here, therefore we are from here**’. The illegal immigrant already foreshadows of course **the idealized neoliberal subject**, the one without political inscription, without papers (and therefore no rights); the illegal immigrant already stands in as the subject neoliberalisation seeks to universalize, the one without papers, homo sacer, and who, consequently, has no other choice than to sell him- or herself to the highest bidder: “Nowadays, when the welfare state is gone, this separation between citizens and non-citizens still remains, but with an additional paradox that non citizens represent the avant-garde within the neo-liberal project, because they are indeed positioned within the labor force market **without any kind of social rights or state protection**. Thus, if we examine this problem in such a way, the sanspapiers and the erased are the avant-garde form of sociality which would prevail if the neoliberal concept is to be fully realized, if it would not be important anymore if someone is a citizen or not, if everybody would be defined only according to their position in the labor market and the labor process” (Pupovac and Karamani 2006: 48). Such new symbolizations through which what is considered to be noise by the police is turned into speech, is where a proper politicization of the spatial should start from, where a possible re-politicization of public civic space resides. These symbolizations should start from the premise that the promise of democracy, political equality, is ‘**wronged**’ by the oligarchic police order, and where those who are unaccounted for, unnamed, whose fictions are only registered as noise, **claim their metaphorical and material space**. Reclaiming the democratic polis as the space of dissensus, disagreement, and as the space where places for enunciating the different, for staging the voices of those unheard or unnoticed are constructed, egalibertarian voices that aspire to universalisation, is exactly where a proper democratic politics should reside. And it is exactly these practices that urgently require attention, nurturing, recognition and valorization. They **demand their own space**; they require the creation of their own material and cultural landscapes, their own emblematic geographies. These are the spaces where the post-political postdemocratic consensus is questioned, where the right to égaliberté is asserted, practices of radical democratization experimented with, and democracy conquered; not an instituted formal arrangement that cannot but subvert itself, but one that aims at overtaking and replacing instituted post-political post-democracy.

### Adv 1

**Renewables aren’t coming**

**Rahl and Braccio 12** (Gary, Senior Vice President, Booz Allen Hamilton, and Ralph, Senior Associate, Booz Allen Hamilton, 6/21/12, “Five Ways to Avert the Looming US Renewable Energy Crisis” http://energy.aol.com/2012/06/21/five-ways-to-avert-the-looming-us-renewable-energy-crisis/

**There is a looming renewable energy crisis**, but it's probably not the one you think. **While national headlines** over the past few months **have focused on controversial federal loan guarantees, or the approaching expiration of key tax credits, the threat to renewable energy is much deeper than just these two areas**. Through Renewable Portfolio Standards (RPS), 29 states and the District of Columbia require electric utilities that supply power to their residents to obtain a specified percentage of their electricity from renewable energy sources by a specified date. For the last decade, RPS has been a resounding bipartisan success story, popular in both "red" and "blue" states alike. Today, they are the linchpin of our country's investment in renewables, setting the requirement that a host of other public subsidies, including tax credits, are intended to support. A recent analysis by Booz Allen Hamilton has shown that RPS will drive over $400 billion in investment in renewable energy by the time they are fully implemented. For perspective, that's more investment than was generated by building the interstate highway system from 1956 to 1992 (adjusted for today's dollars). But **RPS and the investment in renewables** they generate **face a perfect storm across multiple fronts: the emergence of inexpensive and plentiful natural gas, foreign dominance of wind and solar manufacturing, rising pressures on state budgets, and cost reductions in electricity distribution stemming from grid investments.** Without action, **the future of** our investment in **renewable energy is** **very much in doubt**. The Perfect Storm Circumstances have changed dramatically since the first RPS were established. Just a few years ago, it seemed that the price of electricity generated from traditional sources (coal, nuclear) was headed considerably upward, and renewable power would soon be competitive on price without the need for long-term subsidy. But **things have changed quickly since then, with the emergence of very cheap natural gas, flattening demand for electricity, and increased operating efficiencies from utility grid investments - including federal assistance for smart grids. Add it all up and it means that despite the cost improvements we've seen in renewable energy, electricity prices may stabilize at levels that renewables can't compete with for the predictable future. An even bigger threat may be the emergence of low-cost foreign manufacturing of wind and solar** technology and its effect on U.S. jobs. In the area of solar photovoltaics, for example, China's swift rise to global production dominance over the past three years has sparked allegations of price manipulation and dumping in the U.S. **Even with tariffs, U.S. companies will have a hard time competing on price.** With respect to wind technology, some foreign manufacturers have established U.S-based manufacturing facilities, but most have not. **If the $400 billion infrastructure investment driven by RPS is seen as having created a captive market for foreign manufacturing of renewable technology, it undermines a major policy objective of the standards – high-quality domestic job creation. And if that investment is being made by American electricity consumers in the form of both higher rates and higher taxes to fund public subsidies, the support system for renewable energy could find itself just one exposé away from unraveling. For a glimpse of this future, take a look at Europe where, despite a much more enduring commitment to the renewables industry, they've already started to scale back their commitments in the face of government fiscal pressures and eroding market share for renewable manufacturing. It's not a stretch to imagine that happening here**, especially considering the budget situation in many states.

### Adv 2

#### 1NC- Environmental Movements DA

#### The environmental movement is a crucial avenue for social justice now – The environment is a crucial intersectional issue for all movements.

Matheu Kaneshiro and Kirk Lawrence 10, Sociology Grad Students – UC Riverside (Dello Bueno, Richard (Editor); Fasenfest, David (Editor). Studies in Critical Social Sciences, Volume 19 : Social Change, Resistance and Social Practices, p 13-6)

This paper is not intended to be about environmentalism. Despite the nearly exclusive treatment that we give to the environmental movement, we hope that the underlying message presented here will be bigger than environmentalism as an independent movement. Environmentalism is just one of many social concerns that demand attention in the coming millennium. At the beginning of 2009, the world found itself embroiled in a resurgence of the bloody confl ict against Palestinians, a global fi nancial crisis, a continuing humanitarian catastrophe in Darfur, two unmanageable wars of United States (USA) imperialism, and intractable ethnic and gender inequalities that have plagued the history of humanity— just to name a few global problems. Issues such as climate change and environmental justice are just pieces of what could be a larger struggle for a “better world.” Many of the social problems that we face today share common causes (such as neoliberal capitalism and imperialism), and activists of all varieties can benefit from mutual empathy and collaboration. Within this context, we argue that the environmental movement can be a key actor in bringing about (or strengthening) a “movement of many movements— coalitions of coalitions,” a stimulating concept used by Klein (2004). Klein argues that a movement of all varieties, from all nations, can work together to fight against the privatization of the world— the phenomenon that places profi t over people. Global movements can branch out to become numerous local movements, and local movements can tie into global movements. We argue that the patterns of action displayed by the environmental movement at the World Social Forum— the annual global activist conference formed as a response to the World Economic Forum— can be seen as a microcosm for the cultivation of a larger movement of movements in general. The most important assets that environmentalism has are its global reach and ability to connect with a host of other movements; two assets that are essential for the cultivation of a “movement of movements.” It is not our intention to write on environmentalists as an isolate group, nor is it to write on the World Social Forum as the mother of the global anti-systemic struggle. Instead, we simply wish to use the case of environmentalism at the World Social Forum to give us a glimpse of what a global anti-systemic movement can look like, and how it can be produced. Why the Environmental Movement? The environmental movement is especially important because of its popularity, particularly in wealthier nations. Th e growth of environmentalism has been particularly easy to see in the recent years in the United States. In 2006, Al Gore inconveniently warned us of climate change in his Nobel Prize-winning documentary. In 2007, the Live Earth concert series gathered a who’s who list of celebrities and musical acts to call attention to environmental issues. And in 2008, even mainstream Hollywood cashed in on the trend by releasing an entertaining social commentary housed in a movie in Wall-E. And now, it seems as if a majority of inhabitants of the United States are at least paying lip service to environmental issues (except for those who religiously consume and produce). Environmentalism is not restricted to the United States, as many environmentalist groups are found all over the world such as in Kenya’s Green Belt Movement (and others, as we shall see). Th e academic literature also echoes the popularity of the environmental movement, demonstrating that it is one of the largest movements around the world (Johnson and McCarthy 2005, Smith 2004). Studying transnational social movement organizations, Smith (2004) writes that groups focused on environmental issues were the second most numerous in 2000 (167 organizations, representing 17% of the sample), which was second only to human rights (247 organizations, or 26% of the sample). Environmentalism’s popularity also translates into a second valuable asset, which is its political potential. Th ere are a growing number of political institutional channels dedicated to addressing environmental issues, many of them transnational in scope (Rootes 2005). Some have argued that, of the movements emerging from the 1960s, the environmental movement has had among the most salient and enduring impact in world politics (Chase-Dunn and Babones 2006, Rootes 1999). Being so embedded within the culture and political structures of wealthier nations, environmental groups (governmental and nongovernmental alike) also have a third asset, which is their relatively vast cache of resources at their disposal. For example, Brulle and Jenkins (2008) report that USA environmental organizations operate on a collective annual budget of over $2.7 billion and have assets of more than $5.8 billion. A fourth asset that environmentalism has (which was alluded to earlier) is its global reach. Th ere have been three notable United Nations conferences, for example, that have been focused on addressing environmental issues (as well as other similar meetings such as in Kyoto). Not only are there a number of transnational institutions and eff orts to address environmental issues, but there are also a number of grassroots forms of environmentalism found worldwide. Th is introduces us to the next section on environmental justice, which high-lights what is perhaps the most important key to environmentalism’s power: its intersectionality with other movements. The ability to meld its goals with other movements is, we argue, what gives environmentalism so much potential to unite activists from a variety of movements. Th e fi ve valuable assets of environmentalism are exactly what make it so powerful: its popularity, political access, resources, global reach, and connections with other movements. It is because environmentalism has such powerful qualities that we argue that the environmental movement can serve as a gateway movement that can help to facilitate the creation of a global movement of movements. Environmentalism can get formerly complacent people interested in progressive politics, and increasingly expand in scale to cover the gamut of progressive issues from around the world. The following events may transpire in the future: environmentalism will stimulate political mobilization as a “trendy” movement (particularly in wealthier nations), and continue to introduce the newly politicized population to think about other global social problems. Global consciousness will influence those in wealthier nations to be concerned with the struggles in developing nations, diffusing resources to assist them in their struggles (though being careful not to subvert their autonomy). Global movements will then become a thousand local movements, and local movements will increase their ties to global politics. Together, this global multitude will re-structure the world political economy to put people above profit. These hypothetical events are admittedly lofty and difficult to imagine, though much historical change starts with a seemingly implausible idea. It is true that much of this paper will seem to glamorize global environmentalism and affiliated progressive politics, paying little attention to the competition, inconsistencies, and conflict between progressive political groups. However, it is not the intention of this paper to highlight the problems that global progressive politics faces. Instead, this paper will highlight the positives; the fact that there are cases of global social movements that have produced social “good.” Whether one imagines to overturn global neoliberal capitalism or simply to bring health care to one village is not important at this moment; whether one imagines a coherent, single movement or just one local movement is similarly not important. The only thing of importance is that there are individuals and groups who are imagining and acting. This paper will focus its attention on environmentalism that flouts movement and national boundaries, serving as glimpses of what pieces of a global “movement of movements” can look like.

#### Aff destroys the environmental movement –

#### First, elite backlash. Their radicalism undermines the real political solutions of the environmental movement by sparking an elite backlash.

Delicath, '96 (Associate Comm Prof -- Cincy, Earthtalk, p. 164-5)

Finally, the commitment to ecotopia must have a concrete historical basis and be attached to specific historical objectives. The historical basis for a utopian "radical environmentalism" rests in the existing symbolic and material conditions. The conditions of late Western industrialism create the space necessary for the utopian voice to be heard and a climate in which it can be inspiring. Utopianism may be uniquely relevant in the postindustrial context (see Bammer, 1991; Frankel, 1987; Kumar, 1991). Indeed, some believe that current conditions call for utopias." In this context, a utopian dialogue may be more than an appropriate response to the fragmented and alienated conditions of late Western capitalist societies. Radical greens must find a critique and discourse capable of addressing the angst of society and mobilizing people to act in light of the potential of a radical alternative. While a general sense of social fragmentation and alienation coupled with increasing threats to the environment may produce the "crisis conditions" frequently at the source of utopian thinking, **there must be a more adequate incentive to act than the impending doom of ecological catastrophe**. Green utopianists must point to the possibility and potentiality of creating the future.

It is here that specific historical objectives become necessary. Robyn Eckersley has quite eloquently expressed concern for concrete political practices. According to Eckersley (1992), "To be realized, the aspirations released by utopianism must be critically related to one's knowledge of the present, thereby uniting desire with analysis and leading to informed cultural, social, and political engagement" (p. 186). A major shortcoming of the politics of "radical environmentalism" is that it views the commitment to ecological principles and the recognition of humans' interconnectedness with the natural environment as the necessary and sufficient conditions for establishing an ecological society. While such a perspective is wise in suggesting that we bridle human arrogance toward the natural world, **it does not provide the basis for action; it operates merely as a principle for restraint**. At best, a "radical environmentalist" view of politics suggests ways to resist dominant practices. It does not offer a sense of empowerment to change political and economic institutions.

#### Second, Hollow hope – Without a program for change the Aff fails to provide a chance for those who are actually oppressed. Only the negative framework allows for a methodology that even considers a response to oppression.

Ling, ‘1 (Prof at the Graduate Program in International Affairs, The New School, New York, LHM, Post-Colonial International Relations: Conquest and Desire Between Asia and the West)

**Without concrete action** for change, postmodernism's `dissident voices' have **remained bracketed**, disconnected, not really real. In maintaining `a criti­cal distance' or `position offshore' from which to `see the possibility of change' (Shapiro, 1992: 49), the postmodern critic brushed off **too conveniently the immediate cries** of those who know they are burning in the hells of exploitation, racism, sexism, starvation, civil war, and the like but who **have few means or strategies** to deal with them. What hope do *they* have of overthrowing the shackles of sovereignty without a program of action? After all, asked Mark Neufeld, `What is political without partisanship?' (Neufeld, 1994: 31). In not answering these questions, postmodernists recycled, despite their avowals to the contrary, the same sovereign outcome as (neo)realism: that is, discourse **divorced from prac­tice**, analysis from policy, deconstruction from reconstruction, particulars from universals, and critical theory from problem-solving. Dissident international relations could not accommodate an interactive, articulating, self-generative Other. Its exclusive focus on the Western Self en­sured, instead, (neo)realism's sovereignty by relegating the Other to a familiar, subordinate identity: that is, as a mute, passive reflection of the West or utopian projection of the West's dissatisfaction with itself. Critique **became romanti­cized** into a totalizing affair - especially for those who must bear the brunt of its repercussions. bell hooks asked, appropriately: `[s]hould we not be suspicious of postmodern critiques of the "subject" when they surface at a historical moment when many subjugated people feel themselves coming to voice for the first time?' (hooks, 1990: 28). Without this recognition, postmodernists ended up marginalizing, silencing, and exiling precisely those who are `the greatest vic­tims of the West's essentialist conceits (the excolonials and neocolonials, Blacks, women, and so forth)' (Krishna, 1993: 405). Worse yet, added Roger Spegele, dissidence as offshore observation has `freed us from the recognition that we have a moral obligation to do anything about it' (Spegele, 1992: 174).