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# Contention One: Warming

**Newest and most rigorous studies conclude warming is anthropogenic – no alt causes**

**Muller, University of California-Berkeley physics professor, 12**

(Richard A., former MacArthur Foundation fellow, "The Conversion of a Climate-Change Skeptic," 7-28-12, http://www.nytimes.com/2012/07/30/opinion/the-conversion-of-a-climate-change-skeptic.html?pagewanted=all, accessed 8-10-12, mtf)

Call me a converted skeptic… spectrum about what can and should be done.

**Failure to solve warming causes extinction – geological history proves**

**Bushnell, NASA Langley Research Center chief scientist, 10**

(Dennis M. has a MS in mechanical engineering, won the Lawrence A. Sperry Award, AIAA Fluid and Plasma Dynamics Award, the AIAA Dryden Lectureship, and is the recipient of many NASA Medals for outstanding Scientific Achievement and Leadership, "Conquering Climate Change," The Futurist 44. 3, May/Jun 2010, ProQuest, accessed 10-3-12, mtf)

Unless we act, the next century could … sound, they're actually conservative.

**Ocean acidification destroys marine biodiversity and leads to extinction**

**Romm, MIT Physics PhD, 10**

(Joe, Climate Progress editor, Senior Fellow at the American Progress, Acting Assistant Secretary of Energy for Energy Efficiency and Renewable Energy during the Clinton Administration, PhD in Physics from the Massachusetts Institute of Technology, "Nature Geoscience study: Oceans are acidifying 10 times faster today than 55 million years ago when a mass extinction of marine species occurred," 2-18-10, http://thinkprogress.org/climate/2010/02/18/205525/ocean-acidification-study-mass-extinction-of-marine-life-nature-geoscience/?mobile=nc#more-19529, accessed 10-3-12, mtf)

Marine life face some of the worst impacts. We …**carbon dioxide emissions is now**.

**Sea level rise causes extinction – even small rises matter**

**Sato, Daily Galaxy contributing editor, 8**

Rebecca, Contributing Editor at DailyGalaxy.com, former Head Writer at Freedom FastTrack “Can Changes in Sea Level Cause Periods of Mass Extinction?—A Galaxy Exclusive,” 6-19-08, http://www.dailygalaxy.com/my\_weblog/2008/06/changes-in-sea.html, accessed 10-3-12, mtf)

For years scientists have been trying to … to induce. We, as a society, are not.”

**Other nations will model US investment – it’s a bellwether of nuclear tech**

**Adamantiades et al., ICG Aeolian Energy, 9**

(A. Adamantiades, ICG Properties is a real estate development firm; and I. Kessides, The World Bank, "Nuclear power for sustainable development: Current status and future prospects," Energy Policy Volume 37, Issue 12, December 2009, Science Direct, accessed 8-5-12, mtf)

This paper describes the current status and … **in other parts of the world**.

**Large-scale nuclear power transition solves warming – assumes resource and time restraints**

**Knapp et al., University of Zagreb professor, 10**

(Vladimir Knapp, Dubravko Pevec, and Mario Matijević, Faculty of Electrical Engineering and Computing, Department of Applied Physics, University of Zagreb in Croatia, "The potential of fission nuclear power in resolving global climate change under the constraints of nuclear fuel resources and once-through fuel cycles," Energy Policy Volume 38, Issue 11, November 2010, Science Direct, accessed 8-22-12, mtf)

In this study, we have investigated the …s and for public acceptance of nuclear energy.

**Global commercialization key to check developing countries’ emissions**

**Kessides and Kuznetsov, World Bank chief economist, 12**

(Ioannis N., Development Research Group and The World Bank; and Vladimir, Consultant at The World Bank, "Small Modular Reactors for Enhancing Energy Security in Developing Countries," Sustainability 2012, 4.8, http://www.mdpi.com/2071-1050/4/8/1806/htm, accessed 9-29-12, mtf)

Increasing concerns related to … resistance, and reduced financial risk.

**Only the aff solves – alternative sources are of insufficient scope**

**Loudermilk, Institute for National Strategic Studies research associate, 11**

(Micah J., Research Associate for the Energy & Environmental Security Policy program with the Institute for National Strategic Studies at National Defense University, contracted through ASE Inc., "Small Nuclear Reactors and US Energy Security: Concepts, Capabilities, and Costs," IAGS Journal of Energy Security, May 2011 Issue, 5-31-11, http://www.ensec.org/index.php?option=com\_content&view=article&id=314:small-nuclear-reactors-and-us-energy-security-concepts-capabilities-and-costs&catid=116:content0411&Itemid=375, accessed 9-29-12, mtf)

Nuclear vs. Alternatives: a realistic picture … nation’s nuclear energy portfolio.

**No risk of link turns – complete nuclear power chain significantly reduces CO2 emissions**

**Adamantiades et al., ICG Aeolian Energy, 9**

(A. Adamantiades, ICG Properties is a real estate development firm; and I. Kessides, The World Bank, "Nuclear power for sustainable development: Current status and future prospects," Energy Policy Volume 37, Issue 12, December 2009, Science Direct, accessed 8-5-12, mtf)

2.3. Global climate change In 1990 a major … effects of fossil fuel pollutants.

# Contention Two: Proliferation

## Nuclear power will expand globally, even in Japan and Germany. BUT they will be large reactors built outside the US.

**Talbot, Dundee Securities senior mining analyst, 8-14-12**

(David, “Who Will Fill the 24 Million Pound Uranium Supply Gap?: David Talbot”, <http://www.businessinsider.com/who-will-fill-the-24-million-pound-uranium-supply-gap-david-talbot-2012-8>, DOA: 11-5-12, ldg)

The Energy Report: In your last interview, "The … in nuclear power.

## This will result in breakout proliferation-asymmetries undermine deterrence and ensure nuclear war-safeguards are key.

 (Fast/breakout, checks US influence, miscalc risk (small difference/opaqueness)

**Sokolski, Nonproliferation Policy Education Center Executive Director, 09**

(Henry, June 1, 2009, “Avoiding a Nuclear Crowd”, http://www.hoover.org/publications/policy-review/article/5534, 10/3/12, atl)

Finally, several new nuclear weapons … want. None of this, however, is inevitable.

## US construction is key to solve-SMR’s would out compete other models and a strong domestic industry ensures maintenance of the global gold standard.

**Miller, Bipartisan Policy Co-Chair for the Nuclear Initiative, 12**

(Dr. Warren F. “Pete” e-, Former DOE Assistant Secretary for Nuclear Energy, Senator Pete Domenici, July 2012, “Challenges and Opportunities Facing Nuclear Energy in the United States”, http://bipartisanpolicy.org/sites/default/files/Leadership%20in%20Nuclear%20Energy%20Markets.pdf, 8/14/12, atl)

Several other countries, by contrast, … and deployment (RD&D) programs.

## The plan causes other suppliers to model US practices-ensures no proliferation.

**Sokolski, Nonproliferation Policy Education Center Executive Director, 11**

(Henry, “The Post-Fukushima Arms Race?”, Foreign Policy, July, 29, 2011,http://www.foreignpolicy.com/articles/2011/07/29/the\_post\_fukushima\_arms\_race?print=yesandhidecomments=yesandpage=full, 10/9/12, atl)

A Japanese decision to resist temptation and adopt stricter …, as it has reluctantly in the past.

## Other countries follow the US lead-ensures they’ll pick SMR’s and implement safety measures

**Lieberman, American Physical Society senior government relations specialist, 11**

(Jodi, November 15, 2011 “Nonproliferation, Congress, and Nuclear Trade: Plus ça change, plus c’est la même chose” http://csis.org/files/publication/111116\_nonproliferation\_congress\_and\_nucleartrade.pdf)

 U.S. Nonproliferation Influence While 123 … security summit will be held in South Korea in 2012.

## Proliferation causes nuclear war-crisis escalation, aggression, saving face, delegation and launch on warning guarantee it.

Kroenig, Georgetown University Government assistant professor, 12

(Matthew, Assistant Professor of Government at Georgetown University and Stanton Nuclear Security Fellow at Council on Foreign Relations, “The History of Proliferation Optimism: Does It Have A Future?,” 5-26-12, http://www.npolicy.org/article.php?aid=1182andrtid=2, accessed 10-2-12, mtf)

The proliferation optimist position, while … less-resolved opponents to back down.

## Status quo nuclear power will be based off Chinese designs-guarantees accidents and meltdowns

**Tu, Carnegie Energy and Climate Program senior associate, 12**

(Kevin Jianjun. “China’s Nuclear Crossroads.” 3-11. <http://carnegieendowment.org/2012/03/11/china-s-nuclear-crossroads>. Accessed: 9/30/2012. ADC)

 It’s first important to acknowledge that the safety …energy-thirsty China can’t afford to make.

## Nuclear accidents wreck biodiversity

Mousseau, USC biology professor, 2011

(TA, “Conservation consequences of Chernobyl and other nuclear accidents”, Biological Conservation Volume 144, Issue 12, December 2011, Pages 2787–2798, Science Direct, ldg)

The explosion at the Chernobyl nuclear … distances in species when they are rare.

**Extinction**

**Daily et al, Professor, Department of Biological Sciences Stanford, 7**

(11-19, Gretchen, Senior Fellow, Woods Institute for the Environment Director, Center for Conservation Biology Director, Interdisciplinary Program in Environment and Resources Chair, The Natural Capital Project, “ECOSYSTEM SERVICES: Benefits Supplied to Human Societies by Natural Ecosystems,” <http://www.sierraforestlegacy.org/Resources/Conservation/FireForestEcology/ForestEconomics/Economics-Daily97.pdf>) atw

In addition to the production of goods, **ecosystem …**, human beings trying to colonize the moon.

# Plan Text

## The United States federal government should substantially increase loan guarantees for small modular thermal reactors.

# Contention Three: Solvency

## Capitalization is key to nuclear commercialization-only the federal government can leverage the funds necessary

Bennett, Vice President for Public Affairs, Third Way, 10

(Matt, Josh Freed is Director of the Third Way Clean Energy initiative, Jeremy Ershow is a Policy Advisor at Third Way, “Breaking the Nuclear Financing Barrier,” February 10, http://content.thirdway.org/publications/265/Third\_Way\_Idea\_Brief\_-\_Breaking\_the\_Nuclear\_Financing\_Barrier.pdf, accessed 9-30-12, ara)

High financing costs stand in the way … budget request to triple the loan volume.

## SMR’s can be commercialized quickly and are safe-studies prove they have multiple advantages

Kessides and Kuznetsov, World Bank chief economist, 12

(Ioannis N., Development Research Group and The World Bank; and Vladimir, Consultant at The World Bank, "Small Modular Reactors for Enhancing Energy Security in Developing Countries," Sustainability 2012, 4.8, http://www.mdpi.com/2071-1050/4/8/1806/htm, accessed 9-29-12, mtf)

SMRs offer a number of advantages … by significant economies of scale [19].

## NRC will streamline SMR’s

Sullivan, et al., partner, Hogan Lovells’ LLP, 10

(Mary Anne, partner in Hogan Lovells' energy practice in Washington, D.C., Daniel F. Stenger is a partner in Hogan Lovells' energy practice, Amy C. Roma is a senior associate in Hogan Lovells' energy practice, “Are Small Reactors the Next Big Thing in Nuclear?” 12-21-10, <http://www.elp.com/index/display/article-display/3288852302/articles/electric-light-power/volume-88/issue-6/sections/are-small-reactors-the-next-big-thing-in-nuclear.html>, accessed 9-20-12, ara)

The biggest challenge to getting SMRs … through industry working groups.

## SMR’s compete with gas-better risk premium and no volatility

**Rosner, Distinguished Service Professor, Departments of Astronomy and Astrophysics, and Physics – Chicago University, 11**

(Robert e-, Senior Fellow, Computation Institute; Director, Energy Policy Institute; Enrico Fermi Institute; Harris School of Public Policy, Stephen Goldberg, Special Assistant to the Director Argonne National Laboratory, “Small Modular Reactors – Key To Future Nuclear Power Generation In The U.S.”, Energy Policy Institute at Chicago The Harris School of Public Policy Studies, 6/2/12, atl)

In both the 2004 Chicago Study and the …quality for nuclear power plants.

## We have the workforce and infrastructure

**Spencer et al, Thomas A. Roe Institute for Economic Policy Studies research fellow, 11**

(Jack. “A Big Future for Small Nuclear Reactors?” Heritage Foundation. 2-02. <http://www.heritage.org/research/reports/2011/02/a-big-future-for-small-nuclear-reactors>. Accessed: 9/7/2012. ADC)

Domestic Production. Although the …capabilities—all in the United States.

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# Solvency

## Don’t trust their studies

**Barton, 10**

(Charles, frmr PhD Candidate in History, MA in Philsophy, worked on the LFTR concept for about 2/3eds of his ORNL career and recognized by nuclear bloggers most of whom have technical training, and has been mentioned by the Wall Street Journal, October 2, 2010, “Arjun Makhijani and the Modular Small Reactor null-hypothesis”, http://nucleargreen.blogspot.com/2010/10/arjun-makhijani-and-modular-small.html, 10/19/12, atl)

Arjun Makhijani (with Michele Boyd) …Makhijani's fact sheet rates an F.

## Makhijani and Boyd are biased

**Barton, Nuclear Green Energy writer, 11**

(Charles, Quoting Dr. Alexander Cannara, founder of Menlo Green Ribbon Citizens' Committee, electrical engineer, and PhD in Mathematical Methods and Educational Research, and Quoting Kirk Sorenson, President and Chief Technologist at Flibe Energy, ex NASA aerospace engineer, March 27, 2011, “Branding alternative nuclear technology”, http://nucleargreen.blogspot.com/2011/03/branding-alternative-nuclear-technology.html, 9/19/12, atl)

If you think that this discussion so far has been silly and …are comments you say you “encourage”:

# Warming

## No ice age coming – anthropogenic warming is a bigger threat

Feulner and Rahmstorf, Potsdam Institute for Climate Impact Research, 10

(Georg and Stefan, Potsdam Institute for Climate Impact Research in Germany, "On the effect of a new grand minimum of solar activity on the future climate on Earth," GEOPHYSICAL RESEARCH LETTERS, VOL. 37, March 10, 2010, http://www.pik-potsdam.de/~stefan/Publications/Journals/feulner\_rahmstorf\_2010.pdf, accessed 9-15-12, mtf)

3. Results and Conclusions

[14] Results for the evolution of the global mean … lasted for only several decades or a century at most.

## There’s no ice age coming – limited solar effect and northern ice sheet indicators

Cook, University of Queensland Global Change Institute Climate Communication Fellow, 10

(John, Climate Communication Fellow for the Global Change Institute at the University of Queensland, post-graduate degree in solar physics, the science presented on Skeptical Science is not his own but taken directly from the peer reviewed scientific literature, "Are we heading into a new Ice Age?," 7-9-10, http://www.skepticalscience.com/heading-into-new-little-ice-age-intermediate.htm, accessed 9-15-12, mtf)

Just a few centuries ago, the planet experienced a … good conditions for an imminent ice age.

## No ice age for tens of thousands of years

**Chameides, environment professor at Duke, 2008**

(Bill, “Global Warming and Predictions of an Impending Ice Age – Predicting Future Climate”, 10-30, <http://nicholas.duke.edu/thegreengrok/futureclimate>, ldg)

Our current climate regime -– a regime … to our children's well-being.

## Warming now means we won’t be able to warm in the future-that kills everyone.

**Parker, contributor to Future Pundit, 2009**

(Randall, “Global Warming Won't Prevent Ice Age”, 12-29, <http://www.futurepundit.com/archives/006825.html>, ldg)

Writing in Technology Review Duke … can't even plan for 50 years from now. 2000 years is out of the question.

## They can’t win offense—the world is experiencing a goldilocks period of CO2 concentration-the is just enough to prevent global cooling, but we must slow emissions now to prevent climate catastrophe

**AFP 2008**

(Agence France-Presse, “CO2 may prevent next Ice Age: study”, 11-13, <http://www.abc.net.au/science/articles/2008/11/13/2418491.htm>, ldg)

Scheduled shifts in the earth's orbit … other stresses for millions of people.

# Prolif

## Government support is vital-it overcomes financial barriers to nuclear that the market cannot

**Yanosek, Stanford entrepreneur in residence, 2012**

(Kassia, “Financing Nuclear Power in the US”, energyclub.stanford.edu/index.php/Journal/Financing\_Nuclear\_Power\_by\_Kassia\_Yanosek, DOA: 11-2-12, ldg)

Over the course of the last decade, it appeared that concerns … guarantees provided in the 2005 Energy Policy Act.

## Plan solves-reinforces US norms and cradle to grave.

Loudermilk, Institute for National Strategic Studies research associate, 11

(Micah J., Research Associate for the Energy & Environmental Security Policy program with the Institute for National Strategic Studies at National Defense University, contracted through ASE Inc., "Small Nuclear Reactors and US Energy Security: Concepts, Capabilities, and Costs," IAGS Journal of Energy Security, May 2011 Issue, 5-31-11, http://www.ensec.org/index.php?option=com\_content&view=article&id=314:small-nuclear-reactors-and-us-energy-security-concepts-capabilities-and-costs&catid=116:content0411&Itemid=375, accessed 9-30-12, mtf)

For years, proponents of nuclear power … and concerns over the widespread distribution of nuclear fuel allayed.

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## Only evaluate arguments based off the plan text-any alternatives are self serving and regressive which makes 2AC predictability and offense impossible-evaluate the consequences of the AFF and alternative because it is the only wholistic way to evaluate prior questions.

## Role of the ballot’s to simulate enactment of the plan – key to decision making and fairness

**Hager, Bryn Mawr College political science professor, 1992**

(Carol J., “Democratizing Technology: Citizen & State in West German Energy Politics, 1974-1990” Polity, 25.1, project muse, ldg)

During this phase, the citizen initiative attempted to overcome its … in modern technological society.61

## The argument that identity is fabricated – making it infinitely regressive and self-defeatingOakes, professor of philosophy at Monmouth, 95

(Guy, , Straight Thinking about Queer Theory, International Journal of Politics, Culture, and Society, Vol. 8, No. 3 Spring, 1995,pp. 379-388, 9/1/11, atl)

Queer theory maintains that all social …doctrine undermines its own coherence.

## Queer theory is a sham – it has no explanatory power and colonizes more productive postmodern fieldsHalperin, Professor of the History and Theory of Sexuality at the University of Michigan, 3

(David M, , “The Normalization of Queer Theory”, Journal of Homosexuality, Vol. 45, No. 2/3/4, 2003, pp. 339-343, 9/1/11, atl)

The moment that the scandalous … **down its interdisciplinary ambition.**

## Queer theory identifies with an ideal asexual being that reproduces exclusionGreen, assistant professor of sociology at the University of Toronto, 02

(Adam Isaiah, Gay but Not Queer: Toward a Post-Queer Study of Sexuality, Theory and Society, Vol. 31, No. 4 (Aug., 2002), pp. 521-545, 9/1/11, atl)

Yet, despite its laudable ambition and … - i.e., the "social" - in shaping the "sexual.

## Ethical policymaking must be grounded in consequences

**Isaac, political science professor Indiana University, 2002**

(Jeffrey, “Ends, Means, and Politics, Dissent Magazine, Spring 2002, ldg)

Power is not a dirty word or an unfortunate feature of the … undermines political effectiveness.

## Reps don’t come first and don’t cause violence

**Rodwell, Manchester Metropolitan University PhD candidate, 2005**

(Jonathan, “Trendy But Empty: A Response to Richard Jackson”, <http://www.49thparallel.bham.ac.uk/back/issue15/rodwell1.htm>, DOA: 11-8-12, ldg)

In this response I wish to argue that the Post-… of universals and a heuristic model.