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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 …, 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. … **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 … 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 …**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 ….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 … expansion of the 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 … the environmental 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, "…growth 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 …, would ever 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, … development, 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 … 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 … 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, … 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, **…**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 … 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 … 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 … initiative 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 …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 nuclear … capabilities—all in the United States.

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# Solvency

## NRC licensing no longer an obstacle

Forbes 9-27-12

(“The Nuclear Renaissance Is Back, Industry Panel Says”, <http://www.forbes.com/sites/jeffmcmahon/2012/09/27/the-nuclear-renaissance-is-back-industry-panel/>, DOA: 11-5-12, ldg)

They were much more optimistic … country is quite easy.”

# Prolif

## 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 … widespread distribution of nuclear fuel allayed.

## Failure to develop a strong civilian industry brackets the US out of future markets and destroys nonproliferation efforts

**Bengelsdorf, Consultant and former director of both key State and Energy Department offices that are concerned with international nuclear and nonproliferation affairs, 07**

(Harold, “The U.S. Domestic Civil Nuclear Infrastructure and U.S. Nonproliferation Policy” The U.S. Domestic Civil Nuclear Infrastructure AND U.S. Nonproliferation Policy, May 2007, 6/2/12, atl)

The U.S. has and should continue … as it has been in helping to ensure a rigorous system of export controls.

# Warm

## 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 … several decades or a century at most.

# Saudi DA

## US-Saudi relations resilient

Landler and Myers, NY Times, 12-31-11

(Mark and Steven Lee, "In Iran's shadow, U.S. sells jets to Saudi Arabia," The Hindu, 12-31-11, http://www.thehindu.com/opinion/op-ed/article2761339.ece, accessed 1-12-12, mtf)

Fortifying one of its key allies … that was approved last year by Congress.

## Oil is less than 1% of electricity generation AND that amount can’t be displaced

Styles, Managing Director of GSW Strategy Group, 11

(Geoffrey, January 19, “Displacing More Oil from Power Generation” <http://energyoutlook.blogspot.com/2011/01/displacing-more-oil-from-power.html>, accessed 9-7-12, ads)

Based on Department of Energy data the US … that prospect remains some years off, at least.)

## Renewable investment now should trigger the link

**Bossong, SUN DAY Campaign executive director, 2012**

(Kenneth, “IEA sees renewable energy growth accelerating over next 5 years”, 7-5, [http://www.iea.org/newsroomandevents/pressreleases/2012/july/name,28200,en.html](http://www.iea.org/newsroomandevents/pressreleases/2012/july/name%2C28200%2Cen.html), DOA: 10-2-12, ldg)

Renewable power generation is … for both public and private decision makers.”

## No Saudi prolif – no intention and a statements by Riyadh are a ploy to attain a US security guaranteeJacobs, Gulf Policy Analyst at the Institute for Gulf Affairs, 11

[Joshua, “Saudi's Bluff on the Bomb”, http://www.gulfinstitute.org/index.php?option=com\_content&view=article&id=176:saudis-bluff-on-the-bomb&catid=16:news&Itemid=1, 10/7/11, atl]

Saudi Arabia set off alarm bells in … of dollars and years of development.

## Mid-east conflict doesn’t escalate- self-interest contains war. History overwhelmingly proves.

Satloff, Washington Institute for Near East Policy executive director, 6

[Robert, "Forget the Domino Theories," 12-19-06, www.washingtoninstitute.org/templateC06.php?CID=1011, accessed 10-2-10, mss]

The wise men (and woman) don't know … in danger inside Iraq will be the United States.

## No escalation or draw in

Gelb, President of CFR, 10

(Leslie H., “GDP Now Matters More Than Force Subtitle: A U.S. Foreign Policy for the Age of Economic Power”, Foreign Affairs, Vol. 89 No. 6, Nov/Dec, L/N) NJR

Also reducing the likelihood of … they will stop well short of direct confrontation.

# CP

## Perm do both

## DOD implementation fails- cost overruns, delays, lack of accountability

**Carper, Senator, 12**

(Thomas R. D-DE, “Department of Defense Inspector General Details Problem with New Billion Dollar Accounting Systems;  Schedule Slippages and Cost-Overruns Continue;  Sen. [Thomas R. Carper](http://www.lexisnexis.com/lnacui2api/search/XMLCrossLinkSearch.do?bct=A&risb=21_T15531772237&returnToId=20_T15531780296&csi=247474&A=0.9938243401496382&sourceCSI=9369&indexTerm=%23PE0009XOR%23&searchTerm=Thomas%20R.%20Carper%20&indexType=P)(D-DE) News Release,” 7-14-12, Congressional Documents and Publications, accessed l/n 9-15-12, mee)

Today, Sen. [Tom Carper](http://www.lexisnexis.com/lnacui2api/search/XMLCrossLinkSearch.do?bct=A&risb=21_T15531772237&returnToId=20_T15531780296&csi=247474&A=0.9938243401496382&sourceCSI=9369&indexTerm=%23PE0009XOR%23&searchTerm=Tom%20Carper%20&indexType=P)(D-Del.), Chairman of the… waste and abuse, among other needs.

**DOD domestic purchases don’t spill over**

**Marquesee, DOD strategic environmental research and development program executive director, 2012**

(Jeffrey, “Military Installations and Energy Technology Innovations,” in Energy Innovation at the Department of Defense: Assessing the Opportunities”, March, online pdf, DOA: 9-26-12, ldg)

Decisions on implementing these technologies will be … information assurance issues) that create other barriers.

# K

## Perm do the plan and all nme parts of the alt

## Epistemological debate is irrelevant - concrete action is inevitable - they fail to create useful knowledge

**Friedrichs, Oxford politics lecturer, 2009**

(Jorg, “From positivist pretense to pragmatic practice: Varieties of pragmatic methodology in IR scholarship. International Studies Review 11(3): 645–648, ldg)

As Friedrich Nietzsche ([1887] 1994:1; cf. Wilson 2002) knew, …are two sides of the same coin

## Ontology focus is paralyzing – having good enough knowledge is a sufficient condition for action

**Kratochwil, EUI IR professor, 2008**

(Friedrich, The Puzzles of Politics, pg 200-203, ldg)

The lesson seems clear. Even at the …optimal strategies – is somewhat heroic.

**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 … it undermines political effectiveness.