# \*\*\*\*1AC\*\*\*\*

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

# Contention One is Proliferation

## Nuclear power is increasing globally – demand ensures it’ll be large reactors

**Banks et al, Foreign Policy Energy Security Initiative nonresident fellow, 12-16**

(John P. “Nuclear Power in Developing Countries? Let's Talk about It.” 12-16. <http://www.brookings.edu/research/opinions/2012/12/16-nuclear-energy-banks-massy>. Accessed: 1/1/2013. ADC)

 While the developed world gets cold feet on … of others are seriously considering nuclear power, but commitments are pending.

## 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…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 adopt stricter … in time, 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 … mistake that 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 power … 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.

# Contention Two is 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. Three … and diplomatic 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 see … 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 now … **start slashing 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 find explanations for … to deal with the magnitude of sea level rise that we are likely 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 future … **for action 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 …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 energy … 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 When … 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 … effects of fossil fuel pollutants.

# Contention Three is 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 … 2011 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 that can … 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 to … 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 the current … 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.

# \*\*\*\*2AC\*\*\*\*

# Prolif

## Best studies show that even a small scale nuclear war would lead to nuclear winter, cause massive climate change, and result in extinction

Robock, professor of climatology at Rutgers University, 2009

(Alan, Department of Environmental Sciences at Rutgers and associate director of its Center for Environmental Prediction, "Nuclear winter," The Encyclopedia of Earth, 1-6-09, http://www.eoearth.org/article/Nuclear\_winter, accessed 9-9-11, mtf)

Introduction Nuclear winter is a term that … the possibility of a nuclear environmental catastrophe.

## Short flight times, ongoing disputes, no experience and history isn’t a guide.

**Cimbala, Penn St. Political science professor, 08**

(Stephen J, “Anticipatory Attacks: Nuclear Crisis Stability in Future Asia,” Comparative Strategy, Volume 27, Issue 2 March 2008, pages 113-132, 7/31/11, atl)

The spread of nuclear weapons in Asia … avoidance of war outside of Europe.

## Prolif makes preemption likely – state uncertainty

**Knopf, Naval Postgraduate School National Security Affairs professor, 2002**

(Jeffrey, “Recasting the proliferation optimism-pessimism debate”, Security Studies, 12.1, ebsco, ldg)

The second implication of pressures to seek damage … could survive and strike second.

# Warming

**Warming is real and anthropogenic – it’s reversible if we start mitigation now**

**Nuccitelli, environmental scientist, 11**

(Dana Nuccitelli is an environmental scientist at a private environmental consulting firm, Bachelor's Degree in astrophysics from University of California-Berkeley, Master's Degree in physics from University of California-Davis, has been researching climate science, economics, and solutions since 2006, and has contributed to Skeptical Science since 2010, “The Big Picture,” Updated 2011, Originally Posted 9-24-10, http://www.skepticalscience.com/big-picture.html, accessed 10-3-12, mtf)

The Earth is Warming We know the planet is … climate change, and failing to do so would be exceptionally foolish.

## They’re 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 … across the globe, here are comments you say you “encourage”:

# Enviro Justice K

## Environmental pragmatism is best – it allows flexibility to solve immediate problems

**Hirokawa, University of Connecticut Law Professor, 2**

(Keith, “Some Pragmatic Observations about Radical Critique in Environmental Law”, 21 Stan. Envtl. L.J. 253 (2002) , 9/19/12, atl)

By rejecting commitments to theory, … and judges engaged in environmental disputes.

## State based support for environmental policy is critical --- only they have the power and legitimacy.

**Eckersley et al., Melbourne political science professor, 2005**

(Robyn, The State and the Global Ecological Crisis, pg x-xiii, ldg)

Against the background of these developments, this .. of their own case studies and conceptual analyses.

## No root cause-no monocasual explanation.

**Martin, Wollongong University science, tech and society professor, 1990**

(Brian, “Uprooting War”, <http://www.bmartin.cc/pubs/90uw/uw13.html>, DOA: 11-4-11, ldg)

In this chapter and in the six preceding chapters I have … strategies for grassroots movements to uproot them.

## Omission is not exclusion; NO discursive act can include everything; this doesn't mean we reject or marginalize these concerns

**Rorty, Stanford comparative literature professor, 2002**

(Richard, “Hope and the Future”, Peace Review; Jun2002, Vol. 14 Issue 2, p149-155, 7p, ebsco, ldg)

I have no quarrel with Cornell’s and Spivak’s claim that “what is missing in a … be told, in many other ways.

# Ptix

## US industry key to solve Asian prolif

**Ferguson, Federation of American Scientists President, 10**

(Charles, May 4, 2010, “Controlling Asia's Nuclear Power Tigers”, http://www.forbes.com/2010/05/04/asia-nuclear-power-markets-economy-national-security\_2.html, 9/3/12, atl)

Asia's nuclear power tigers are becoming …agreements that proliferation-prone methods are not permitted.

## In spite of areas of tension relations with India are high now and will continue to improve throughout Obama's 2nd term

Desai, fellow @ Truman National Security Project, 2012

(Ronak, November 15, <http://www.huffingtonpost.com/ronak-d-desai/usindia-relations-under-t_b_2115396.html>, accessed 1/19/2013) mph

What's ahead for US-India relations now that … of what's on the horizon, the future looks bright for US-India relations.

## Reform won’t pass – GOP will block, optimists are empirically wrong, and talks won’t begin for a month

CNN Wire, 1-16-13

(“Solve immigration without a quick path to citizenship,” Lexis, d/a 1-18-13, ads)

Now Obama wants to go further. According to the … status quo is preserved. See you in 10 years.

## Nuclear power is massively popular- politicians get on board

Whitman, CASEnergy Co-Chair, 12

(Christine Todd, Former EPA Administrator and New Jersey Governor, "Nuclear Power Garners Bipartisan Support," 8-13-12, http://energy.nationaljournal.com/2012/08/finding-the-sweet-spot-biparti.php#2237728, accessed 9-30-12, mtf)

The energy policy that I’ve seen garner … of the aisle can support.

**Winners win- plan is key to Obama political power**

**Creamer, political organizer and strategist for four decades, 1-2**

(Robert, he and his firm, Democracy Partners, work with many of the country’s most significant issue campaigns, one of the major architects and organizers of the successful campaign to defeat the privatization of Social Security, he has been a consultant to the campaigns to end the war in Iraq, pass universal health care, pass Wall Street reform, change America’s budget priorities and enact comprehensive immigration reform, he has also worked on hundreds of electoral campaigns at the local, state and national level, "Why GOP Collapse on the Payroll Tax Could be a Turning Point Moment," www.huffingtonpost.com/robert-creamer/why-gop-collapse-on-the-p\_b\_1167491.html, accessed 1-2-12, mss)

**Strength and victory are** **enormous …** the run - that's the time to chase them.

# Oil

## 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 their … Muslims in danger inside Iraq will be the United States.

## Nuclear doesn’t trade off with oil

**Styles, GSW Strategy Group managing director, 12**

(Geoffrey. “How Helpless Are We in the Face of Rising Oil Prices?” 2-24. <http://energyoutlook.blogspot.com/2012/02/how-helpless-are-we-in-face-of-rising.html>. Accessed: 10/02/2012. ADC)

 To see why requires a sense of how the oil …, they are a rhetorical diversion.

## OPEC will cut production to keep prices high – fear of revenue losses

[Yetiv](http://ww2.odu.edu/%26#126;syetiv/), Old Dominion University Political Science Professor, 9-4-12

 (Steve, “Is the Energy Boom a Mirage?,” <http://www.nytimes.com/2012/09/05/opinion/is-the-energy-boom-a-mirage.html>, accessed 9-5-12, ads

Fourth, the [Organization of the Petroleum Exporting Countries](http://www.opec.org/opec_web/en/) … quell dissent and maintain domestic control.

## US isn’t key – growth in developing countries outweighs

Gold, WSJ staff writer, 2012

(Russell, “Drivers Cut Back on $4 Gas”, Wall Street Journal, April 28, http://online.wsj.com/article/SB10001424052748703367004576289292254881456.html, accessed 9/18/12, SLC)

After weeks of paying steadily more for … $112.76 a barrel in Wednesday trading on the New York Mercantile Exchange.

## High oil prices collapse the CCP

**Peek, The Fiscal Times, 2011**

(Liz, “Oil Price Surge: How Libya Threatens China Growth”, 4-13, <http://www.thefiscaltimes.com/Columns/2011/04/13/Oil-Price-Surge-How-Libya-Threatens-China-Growth.aspx>, DOA: 9-21-11, ldg)

For China, though, the Libyan engagement is not … the “inflation tiger” back in its cage.

## Triggers civil war and lashout

**Friedberg, Princeton International Affairs professor, 2010**

(Aaron, “Implications of the Financial Crisis for the US-China Rivalry,” Survival, Volume 52, Issue 4, August, ebsco, ldg)

Despite its magnitude, Beijing’s … perhaps unexpectedly aggressive, ways.