### Note

Based on the fact that there is a “warming core” with hella cards that exists in the files only going one direction I figured I had to do SOMETHING to make the advantage winnable – here are the cards for that

### Card

Consensus is not even a question – warming is real – all evidence going the other way should be rejected because they are paid off and don’t write in peer reviewed scientific journals

Lewandowsky and Ashley 11 (Stephan, Professor of Cognitive Studies at the University of Western Australia, and Michael, Professor of Astrophysics at the University of New South Wales, “The false, the confused and the mendacious: how the media gets it wrong on climate change
,” <http://theconversation.edu.au/the-false-the-confused-and-the-mendacious-how-the-media-gets-it-wrong-on-climate-change-1558>, 6/24/11)

Certainty in science¶ If you ask a scientist whether something is “settled” beyond any doubt, they will almost always reply “no”.¶ Nothing is 100% certain in science.¶ So how certain is climate science? Is there a 50% chance that the experts are wrong and that the climate within our lifetimes will be just fine? Or is there a 10% chance that the experts are wrong? Or 1%, or only 0.0001%?¶ The answer to these questions is vital because if the experts are right, then we must act to avert a major risk.¶ Dropping your phone¶ Suppose that you lose your grip on your phone. Experience tells us that the phone will fall to the ground.¶ You drop a phone, it falls down.¶ Fact.¶ Science tells us that this is due to gravity, and no one doubts its inevitability.¶ However, while science has a good understanding of gravity, our knowledge is only partial. In fact, physicists know that at a very deep level our theory of gravity is inconsistent with quantum mechanics, so one or both will have to be modified.¶ We simply don’t know for sure how gravity works.¶ But we still don’t jump off bridges, and you would be pretty silly to drop your phone onto a concrete floor in the hope that gravity is wrong.¶ Climate change vs. gravity: Greater complexity, comparable certainty¶ Our predictions of climate change aren’t as simple as the action of gravity on a dropped phone.¶ The Earth is a very complex system: there are natural effects like volcanoes, and variations in the sun; there are the vagaries of the weather; there are complicating factors such as clouds, and how ice responds; and then there are the human influences such as deforestation and CO₂ emissions.¶ But despite these complexities, some aspects of climate science are thoroughly settled.¶ We know that atmospheric CO₂ is increasing due to humans. We know that this CO₂, while being just a small fraction of the atmosphere, has an important influence on temperature.¶ We can calculate the effect, and predict what is going to happen to the earth’s climate during our lifetimes, all based on fundamental physics that is as certain as gravity.¶ The consensus opinion of the world’s climate scientists is that climate change is occurring due to human CO₂ emissions. The changes are rapid and significant, and the implications for our civilisation may be dire. The chance of these statements being wrong is vanishingly small.¶ Scepticism and denialism¶ Some people will be understandably sceptical about that last statement. But when they read up on the science, and have their questions answered by climate scientists, they come around.¶ These people are true sceptics, and a degree of scepticism is healthy.¶ Other people will disagree with the scientific consensus on climate change, and will challenge the science on internet blogs and opinion pieces in the media, but no matter how many times they are shown to be wrong, they will never change their opinions.¶ These people are deniers.¶ The recent articles in The Conversation have put the deniers under the microscope. Some readers have asked us in the comments to address the scientific questions that the deniers bring up.¶ This has been done.¶ Not once. Not twice. Not ten times. Probably more like 100 or a 1000 times.¶ Denier arguments have been dealt with by scientists, again and again and again.¶ But like zombies, the deniers keep coming back with the same long-falsified and nonsensical arguments.¶ The deniers have seemingly endless enthusiasm to post on blogs, write letters to editors, write opinion pieces for newspapers, and even publish books. What they rarely do is write coherent scientific papers on their theories and submit them to scientific journals. The few published papers that have been sceptical about climate change have not withstood the test of time.

### 1AR xt

#### Consensus goes our way on the impact

Alley 10 – Professor of Geoscience @ Penn State¶ Richard, Professor of Geoscience @ Penn State, authored over 200 refereed scientific papers, which are "highly cited" according to a prominent indexing service, erved with distinguished national and international teams on major scientific assessment bodies, 11-17-2010, “CLIMATE CHANGE SCIENCE; COMMITTEE: HOUSE SCIENCE AND TECHNOLOGY; ¶ SUBCOMMITTEE: ENERGY AND ENVIRONMENT,” CQ Congressional Testimony, Lexis

Background on Climate Change and Global Warming. Scientific assessments such as those of the National Academy of Sciences of the United States (e.g., National Research Council, 1975; 1979; 2001; 2006; 2008; 2010a; 2010b), the U.S. Climate Change Science Program, and the Intergovernmental Panel on Climate Change have for decades consistently found with increasingly high scientific confidence that human activities are **raising the concentration** of CO2 and other greenhouse gases in the atmosphere, that this has a warming effect on the climate, that the **climate is warming** as expected, and that the changes **so far are small** compared to those projected if humans burn much of the fossil fuel on the planet. The basis for expecting and understanding warming from CO2 is the fundamental physics of how energy interacts with gases in the atmosphere. This knowledge has been available for over a century, was greatly refined by military research after World War II, and is directly confirmed by satellite measurements and other data (e.g., American Institute of Physics, 2008; Harries et al., 2001; Griggs and Harries, 2007). Although a great range of ideas can be found in scientific papers and in statements by individual scientists, the scientific assessments by bodies such as the National Academy of Sciences **consider the full range** of available information. The major results brought forward are based on multiple lines of evidence provided by different research groups with different funding sources, and have repeatedly been tested and confirmed. Removing the work of any scientist or small group of scientists would still leave a strong scientific basis for the main conclusions. Ice Changes. There exists increasingly strong evidence for widespread, ongoing reductions in the Earth's ice, including snow, river and lake ice, Arctic sea ice, permafrost and seasonally frozen ground, mountain glaciers, and the great ice sheets of Greenland and Antarctica. The trends from warming are modified by effects of changing precipitation and of natural variability, as I will discuss soon, so not all ice everywhere is always shrinking. Nonetheless, warming is important in the overall loss of ice, although changes in oceanic and atmospheric circulation in response to natural or human causes also have contributed and will continue to contribute to changes. The most recent assessment by the IPCC remains relevant (Lemke et al., 2007). Also see the assessment of the long climatic history of the Arctic by the U.S. Climate Change Science Program (CCSP, 2009), showing that in the past warming has led to shrinkage of Arctic ice including sea ice and the Greenland ice sheet, and that sufficiently large warming has removed them entirely.