## 1NC

#### Strong commercial space catalyzes tech innovation – progress at the margins and spinoff tech change global information networks

Joshua **Hampson 2017**, Security Studies Fellow at the Niskanen Center, 1-25-2017, “The Future of Space Commercialization”, Niskanen Center, https://republicans-science.house.gov/sites/republicans.science.house.gov/files/documents/TheFutureofSpaceCommercializationFinal.pdf

Innovation is generally hard to predict; some new technologies seem to come out of nowhere and others only take off when paired with a new application. It is difficult to predict the future, but **it is reasonable to expect that a growing space economy would open opportunities for technological and organizational innovation**. In terms of technology, **the difficult environment of outer space helps incentivize progress along the margins.** Because each object launched into orbit costs a significant amount of money—at the moment between $27,000 and $43,000 per pound, though that will likely drop in the future —each 19 reduction in payload size saves money or means more can be launched. At the same time, the ability to fit more capability into a smaller satellite opens outer space to actors that previously were priced out of the market. This is one of the reasons why small, affordable satellites are increasingly pursued by companies or organizations that cannot afford to launch larger traditional satellites. These small 20 satellites also provide non-traditional launchers, such as engineering students or prototypers, the opportunity to learn about satellite production and test new technologies before working on a full-sized satellite. **That expansion of developers, experimenters, and testers cannot but help increase innovation opportunities**. **Technological developments from outer space have been applied to terrestrial life since the earliest days of space exploration**. The National Aeronautics and Space Administration (NASA) maintains a website that lists technologies that have spun off from such research projects**. Lightweight** 21 **nanotubes**, useful in protecting astronauts during space exploration, **are now being tested for applications in emergency response gear and electrical insulation**. The need for certainty about the resiliency of materials used in space led to the development of an analytics tool useful across a range of industries. Temper foam, the material used in memory-foam pillows, was developed for NASA for seat covers. **As more companies pursue their own space goals, more innovations will likely come from the commercial sector. Outer space is not just a catalyst for technological development.** Satellite constellations and their unique line-of-sight vantage point **can provide new perspectives to old industries**. Deploying satellites into low-Earth orbit, as Facebook wants to do, can connect large, previously-unreached swathes of 22 humanity to the Internet. **Remote sensing technology could change how whole industries operate, such as crop monitoring, herd management, crisis response, and land evaluation, among others**. 23 While satellites cannot provide all essential information for some of these industries, they can fill in some useful gaps and work as part of a wider system of tools. **Space infrastructure, in helping to change how people connect and perceive Earth, could help spark innovations on the ground as well. These innovations, changes to global networks, and new opportunities could lead to wider economic growth.**

#### Tech innovation solves every existential threat – cumulative extinction events outweigh the aff

Dylan **Matthews 18**. Co-founder of Vox, citing Nick Beckstead @ Rutgers University. 10-26-2018. "How to help people millions of years from now." Vox. https://www.vox.com/future-perfect/2018/10/26/18023366/far-future-effective-altruism-existential-risk-doing-good

If you care about improving human lives, you should overwhelmingly care about those quadrillions of lives rather than the comparatively small number of people alive today. The 7.6 billion people now living, after all, amount to less than 0.003 percent of the population that will live in the **future**. It’s reasonable to suggest that those **quadrillions** of future people have, accordingly, **hundreds of thousands of times** more moral weight than those of us living here **today** do. That’s the basic argument behind Nick Beckstead’s 2013 Rutgers philosophy dissertation, “On the overwhelming importance of shaping the far future.” It’s a glorious mindfuck of a thesis, not least because Beckstead shows very convincingly that this is a conclusion any plausible moral view would reach. It’s not just something that weird utilitarians have to deal with. And Beckstead, to his considerable credit, walks the walk on this. He works at the Open Philanthropy Project on grants relating to the far future and runs a charitable fund for donors who want to prioritize the far future. And arguments from him and others have turned “long-termism” into a very vibrant, important strand of the effective altruism community. But what does prioritizing the far future even mean? The most **literal** thing it could mean is preventing human **extinction**, to ensure that the species persists as long as possible. For the long-term-focused effective altruists I know, that typically means identifying concrete threats to humanity’s continued existence — like unfriendly artificial intelligence, or a pandemic, or global warming/out of control geoengineering — and engaging in activities to prevent that specific eventuality. But in a set of slides he made in 2013, Beckstead makes a compelling case that while that’s certainly **part** of what caring about the far future entails, approaches that address **specific threats** to humanity (which he calls “**targeted**” approaches to the far future) have to **complement** “**broad**” approaches, where instead of trying to **predict** what’s going to kill us all, you just **generally try to keep civilization running as best it can**, so that it is, as a whole, well-equipped to deal with **potential** extinction events in the **future**, not just in 2030 or 2040 but in 3500 or 95000 or even 37 million. In other words, caring about the far future **doesn’t mean just paying attention to low-probability risks of total annihilation**; it also means **acting on pressing needs now**. For example: We’re going to be **better prepared** to prevent extinction from **AI** or a **supervirus** or **global warming** if society as a whole makes **a lot of scientific progress**. And a significant bottleneck there is that the vast majority of humanity doesn’t get high-enough-quality education to engage in scientific research, if they want to, which reduces the odds that we have enough trained scientists to come up with the breakthroughs we need as a civilization to survive and thrive. So maybe one of the **best thing**s we can do for the **far future** is to improve school systems — here and now — to harness the group economist Raj Chetty calls “lost Einsteins” (**potential innovators** who are thwarted by poverty and inequality in rich countries) and, more importantly, the hundreds of millions of kids in developing countries dealing with even worse education systems than those in depressed communities in the rich world. What if living ethically for the far future means living ethically now? Beckstead mentions some other broad, or very broad, ideas (these are all his descriptions): Help make computers faster so that people everywhere can work more efficiently Change intellectual property law so that technological innovation can happen more quickly Advocate for open borders so that people from poorly governed countries can move to better-governed countries and be more productive Meta-research: improve **incentives** and **norms** in **academic work** to better advance human knowledge Improve education Advocate for political party X to make future people have values more like political party X ”If you look at these areas (economic growth and technological progress, access to information, individual capability, social coordination, motives) a lot of everyday good works contribute,” Beckstead writes. “An implication of this is that a lot of everyday good works are good from a broad perspective, even though hardly anyone thinks explicitly in terms of far future standards.” Look at those examples again: It’s just a list of what normal altruistically motivated people, not effective altruism folks, generally do. Charities in the US love talking about the lost opportunities for innovation that poverty creates. Lots of smart people who want to make a difference become scientists, or try to work as teachers or on improving education policy, and lord knows there are plenty of people who become political party operatives out of a conviction that the moral consequences of the party’s platform are good. All of which is to say: Maybe effective altruists aren’t that special, or at least maybe we don’t have access to that many specific and weird conclusions about how best to help the world. If the far future is what matters, and generally trying to make the world work better is among the best ways to help the far future, then effective altruism just becomes plain ol’ do-goodery.\*

## 2

#### Interp: the aff must only defend banning appropriation

#### violation: they defend the nationalization of private entities

#### standards

#### 1] limits- allows them to link out of neg generics because they can say that they still utilize the private sector and they go beyond the limits of the res. The aff could add anything they could possible fathom to the resolution. I can’t be excepted to prep out every single instance of every single policy – which means I get destroyed by 1ar frontlines. Limits key to fairness because without limits the aff could just be infinitely abusive. Also key to jurisdiction because it sets up what the judge can and can’t vote on – If the aff adds arbitrary planks to the resolution, then they are no longer debating the intent of the resolution so the judge can’t vote aff.

#### 2] ground- neg can’t run anything bc the aff basically forces us to double turn and debate ourselves. All neg generics/positions depend on some IL to the aff not having priv space but the aff effectively removes that and takes away any positions we can run. That’s k2 education bc we can’t properly debate the topic

#### 3] tva- ban approp of outer space by priv entities

#### 4] Precision o/w – anything else justifies the aff arbitrarily jettisoning words in the resolution which decks negative ground and preparation because the aff is no longer bound by the resolution

#### Fainess & Education are voters-

#### Topicality is Drop the Debater – it’s a fundamental baseline for debate-ability.

#### Use Competing Interps – 1] Topicality is a yes/no question, you can’t be reasonably topical and 2] Reasonability invites arbitrary judge intervention and a race to the bottom of questionable argumentation.

#### No RVI’s - 1] Forces the 1NC to go all-in on Theory which kills substance education, 2] Encourages Baiting since the 1AC will purposely be abusive, and 3] Illogical – you shouldn’t win for not being abusive.

## Case

### fw

#### The standard is maximizing expected wellbeing.

#### 1. Only util respects equality by giving the same weight to all- side constraints unduly favor those *directly harmed*. They also freeze actions since states *always violate some rights*, have no unified intention, and all actions have some non-zero risk of violating a side-constraint.

#### 2. The social contract requires states *maximize utility* since they’re responsible to their citizenry.

#### 3. Degrees of wrongness- if I break a promise to meet up for lunch, it’s *not as bad* as breaking a promise to take a *dying person* to the hospital- only consequences explain why the second one is *much worse* than the first.

#### 4. Extinction outweighs *under any framework*- moral uncertainty and future gens.

**Pummer 15** — (Theron Pummer, Junior Research Fellow in Philosophy at St. Anne's College, University of Oxford, “Moral Agreement on Saving the World,” Practical Ethics University of Oxford, 5-18-2015, Available Online at http://blog.practicalethics.ox.ac.uk/2015/05/moral-agreement-on-saving-the-world/, accessed 7-2-2018, HKR-AM) \*\*we do not endorse ableist language=

There appears to be lot of **disagreement** in moral philosophy. Whether these many apparent disagreements are deep and irresolvable, I believe there is **at least one thing** it is **reasonable** to agree on right now, whatever general moral view we adopt: that it is **very important** to **reduce the risk** that **all intelligent beings** on this planet are **eliminated by an enormous catastrophe**, such as a **nuclear war**. How we might in fact try to reduce such existential risks is discussed elsewhere. My claim here is only that we – whether we’re consequentialists, deontologists, or virtue ethicists – should all agree that we should try to save the world. According to consequentialism, we should maximize the good, where this is taken to be the goodness, from an impartial perspective, of outcomes. Clearly one thing that makes an outcome good is that the people in it are doing well. There is little disagreement here. If the **happiness** or **well-being** of possible future people is **just as important** as that of people who already exist, and if they would have good lives, it is not hard to see how **reducing existential risk** is **easily the most important thing in the whole world**. This is for the familiar reason that there are **so many people** who could exist in the future – there are **trillions upon trillions**… upon trillions. There are so many possible future people that **reducing existential risk** is **arguably the most important thing** in the world, **even if the well-being of these possible people were given only 0.001% as much weight as that of existing people**. Even on a wholly person-affecting view – according to which there’s nothing (apart from effects on existing people) to be said in favor of creating happy people – the case for reducing existential risk is very strong. As noted in this seminal paper, this case is strengthened by the fact that there’s a good chance that many existing people will, with the aid of life-extension technology, live **very long** and **very high quality lives**. You might think what I have just argued applies to consequentialists only. There is a tendency to assume that, if an argument appeals to consequentialist considerations (the goodness of outcomes), it is irrelevant to non-consequentialists. But that is a huge mistake. Non-consequentialism is the view that there’s more that determines rightness than the goodness of consequences or outcomes; it is **not the view that the latter don’t matter**. Even John Rawls wrote, “All ethical doctrines worth our attention take consequences into account in judging rightness. One which did not would simply be irrational, crazy.” **Minimally plausible versions of deontology and virtue ethics** must be concerned in part with **promoting the good**, from an **impartial point of view**. They’d thus imply very **strong reasons to reduce existential risk**, at least when this doesn’t significantly involve doing harm to others or damaging one’s character. What’s even more surprising, perhaps, is that even if our own good (or that of those near and dear to us) has much greater weight than goodness from the impartial “point of view of the universe,” indeed even if the latter is entirely morally irrelevant, we may nonetheless have very strong reasons to reduce existential risk. Even egoism, the view that each agent should maximize her own good, might imply strong reasons to reduce existential risk. It will depend, among other things, on what one’s own good consists in. If well-being consisted in pleasure only, it is somewhat harder to argue that egoism would imply strong reasons to reduce existential risk – perhaps we could argue that one would maximize her expected hedonic well-being by funding life extension technology or by having herself cryogenically frozen at the time of her bodily death as well as giving money to reduce existential risk (so that there is a world for her to live in!). I am not sure, however, how strong the reasons to do this would be. But views which imply that, if I don’t care about other people, I have no or very little reason to help them are not even minimally plausible views (in addition to hedonistic egoism, I here have in mind views that imply that one has no reason to perform an act unless one actually desires to do that act). To be minimally plausible, egoism will need to be paired with a more sophisticated account of well-being. To see this, it is enough to consider, as Plato did, the possibility of a ring of invisibility – suppose that, while wearing it, Ayn could derive some pleasure by helping the poor, but instead could derive just a bit more by severely harming them. Hedonistic egoism would absurdly imply she should do the latter. To avoid this implication, egoists would need to build something like the meaningfulness of a life into well-being, in some robust way, where this would to a significant extent be a function of other-regarding concerns (see chapter 12 of this classic intro to ethics). But once these elements are included, we can (roughly, as above) argue that this sort of egoism will imply strong reasons to reduce existential risk. Add to all of this Samuel Scheffler’s recent intriguing arguments (quick podcast version available here) that most of what makes our lives go well would be undermined if there were no future generations of intelligent persons. On his view, my life would contain vastly less well-being if (say) a year after my death the world came to an end. So obviously if Scheffler were right I’d have very strong reason to reduce existential risk. We should also take into account **moral uncertainty**. What is it reasonable for one to do, when one is uncertain not (only) about the empirical facts, but also about the moral facts? I’ve just argued that there’s agreement among **minimally plausible ethical views** that we have strong reason to reduce existential risk – not only consequentialists, but also **deontologists**, **virtue ethicists**, and **sophisticated egoists** should agree. But even those (hedonistic egoists) who disagree should have a significant level of confidence that they are mistaken, and that one of the above views is correct. Even if they were **90% sure** that their view is the correct one (and 10% sure that one of these other ones is correct), they would have **pretty strong reason**, from the standpoint of **moral uncertainty**, to **reduce existential risk**. Perhaps most disturbingly still, even if we are only 1% sure that the well-being of possible future people matters, it is at least arguable that, from the standpoint of moral uncertainty, reducing existential risk is the **most important thing in the world**. Again, this is largely for the reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. (For more on this and other related issues, see this excellent dissertation). Of course, it is uncertain whether these untold trillions would, in general, have good lives. It’s possible they’ll be miserable. It is enough for my claim that there is moral agreement in the relevant sense if, at least given certain empirical claims about what future lives would most likely be like, all minimally plausible moral views would converge on the conclusion that we should try to save the world. While there are some non-crazy views that place significantly greater moral weight on avoiding suffering than on promoting happiness, for reasons others have offered (and for independent reasons I won’t get into here unless requested to), they nonetheless seem to be fairly implausible views. And even if things did not go well for our ancestors, I am optimistic that they will overall go fantastically well for our descendants, if we allow them to. I suspect that most of us alive today – at least those of us not suffering from extreme illness or poverty – have lives that are well worth living, and that things will continue to improve. Derek Parfit, whose work has emphasized future generations as well as agreement in ethics, described our situation clearly and accurately: “We live during the hinge of history. Given the scientific and technological discoveries of the last two centuries, the world has never changed as fast. We shall soon have even greater powers to transform, not only our surroundings, but ourselves and our successors. If we act wisely in the next few centuries, humanity will survive its most dangerous and decisive period. Our descendants could, if necessary, go elsewhere, spreading through this galaxy…. Our descendants might, I believe, make the further future very good. But that good future may also depend in part on us. If our selfish recklessness ends human history, we would be **acting very wrongly**.” (From chapter 36 of On What Matters)

### case

1. public approp fills in and maintains the exact same capitalist mentality which circumvents
2. no il btwn ending private approp and ending cap broadly
3. don’t solve for colonialism – no warrant
4. cant break down cap – lets private companies exist underguise but doesn’t end
5. they have the worst author quals – poets or jacobin who don’t cite data and are closed minded arent proper authors
6. nationalizing space doesn’t solve for cap – at best it is only that contention but no warrants for cap
7. no ! to space industrial complex
8. weak il – kramer says one small line that doesn’t explicitly point to capitlism
9. doesn’t solve political econ – plan is about space not this means can solve c3

#### Privatization key to continued space exploration---competition and interest

* Centralized gov will inevitably be preoccupied with national security and pride, private companies have the opportunity to pursue their own individual goals which puts space at the forefront.

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There’s no shortage of hype surrounding the commercial space industry. But while tech leaders promise us moon bases and settlements on Mars, the space economy has thus far remained distinctly local — at least in a cosmic sense. Last year, however, we crossed an important threshold: For the first time in human history, humans accessed space via a vehicle built and owned not by any government, but by a private corporation with its sights set on affordable space settlement. It was the first significant step towards building an economy both in space and for space. The implications — for business, policy, and society at large — are hard to overstate. In 2019, 95% of the estimated $366 billion in revenue earned in the space sector was from the space-for-earth economy: that is, goods or services produced in space for use on earth. The space-for-earth economy includes telecommunications and internet infrastructure, earth observation capabilities, national security satellites, and more. This economy is booming, and though research shows that it faces the challenges of overcrowding and monopolization that tend to arise whenever companies compete for a scarce natural resource, projections for its future are optimistic. Decreasing costs for launch and space hardware in general have enticed new entrants into this market, and companies in a variety of industries have already begun leveraging satellite technology and access to space to drive innovation and efficiency in their earthbound products and services. In contrast, the space-for-space economy — that is, goods and services produced in space for use in space, such as mining the Moon or asteroids for material with which to construct in-space habitats or supply refueling depots — has struggled to get off the ground. As far back as the 1970s, research commissioned by NASA predicted the rise of a space-based economy that would supply the demands of hundreds, thousands, even millions of humans living in space, dwarfing the space-for-earth economy (and, eventually, the entire terrestrial economy as well). The realization of such a vision would change how all of us do business, live our lives, and govern our societies — but to date, we’ve never even had more than 13 people in space at one time, leaving that dream as little more than science fiction. Today, however, there is reason to think that we may finally be reaching the first stages of a true space-for-space economy. SpaceX’s recent achievements (in cooperation with NASA), as well as upcoming efforts by Boeing, Blue Origin, and Virgin Galactic to put people in space sustainably and at scale, mark the opening of a new chapter of spaceflight led by private firms. These firms have both the intention and capability to bring private citizens to space as passengers, tourists, and — eventually — settlers, opening the door for businesses to start meeting the demand those people create over the next several decades with an array of space-for-space goods and services. Welcome to the (Commercial) Space Age In our recent research, we examined how the model of centralized, government-directed human space activity born in the 1960s has, over the last two decades, made way for a new model, in which public initiatives in space increasingly share the stage with private priorities. Centralized, government-led space programs will inevitably focus on space-for-earth activities that are in the public interest, such as national security, basic science, and national pride. This is only natural, as expenditures for these programs must be justified by demonstrating benefits for citizens — and the citizens these governments represent are (nearly) all on earth. In contrast to governments, the private sector is eager to put people in space to pursue their own personal interests, not the state’s — and then supply the demand they create. This is the vision driving SpaceX, which in its first twenty years has entirely upended the rocket launch industry, securing 60% of the global commercial launch market and building ever-larger spacecraft designed to ferry passengers not just to the International Space Station (ISS), but also to its own promised settlement on Mars. Today, the space-for-space market is limited to supplying the people who are already in space: that is, the handful of astronauts employed by NASA and other government programs. While SpaceX has grand visions of supporting large numbers of private space travelers, their current space-for-space activities have all been in response to demand from government customers (i.e., NASA). But as decreasing launch costs enable companies like SpaceX to leverage economies of scale and put more people into space, growing private sector demand (that is, tourists and settlers, rather than government employees) could turn these proof-of-concept initiatives into a sustainable, large-scale industry. This model — of selling to NASA with the hopes of eventually creating and expanding into a larger private market — is exemplified by SpaceX, but the company is by no means the only player taking this approach. For instance, while SpaceX is focused on space-for-space transportation, another key component of this burgeoning industry will be manufacturing.

**Capitalism is sustainable and humanity’s only hope against catastrophic climate change**

Shi-Ling **Hsu 21**, D'Alemberte Professor of Law at the Florida State University College of Law, Sept 2021, Capitalism and the Environment, Cambridge University Press, p. 50-52

2.8 CHOOSING CAPITALISM TO SAVE THE ENVIRONMENT: LARGE-SCALE DEPLOYMENT Finally, a third reason that capitalism is **suited to** the job of **environmental restoration** and **protection** is its ability to **undertake** and complete **projects at very large scales**. In keeping with a major thesis of this book, construction at very large scales should give us a little pause, because of the propensity of capital to metastasize into a source of political resistance to change. But some global problems, especially climate change, may require very large-scale enterprises. For example, because **greenhouse gas emissions** may **already** have **passed a threshold** for **catastrophic climate change**, **technology is** almost certainly **needed** to chemically **capture carbon dioxide** from ambient air. But carbon dioxide is only about 0.15% of ambient air by molecular weight, and a tremendous amount of ambient air must be processed just to capture a small amount of carbon dioxide. This technology has often been referred to as "**direct air capture**," or "carbon removal." Given that inherent limitation, direct air capture technology must be deployed **at vast scales** in order to make any appreciable difference in greenhouse gas concentrations. There is certainly no guarantee that direct air capture will be a silver bullet. But if it is to be an effectual item on a menu of survival techniques, it will more assuredly **be accomplished under the** incentives of a **capitalist economy**. Capitalism might also help with the looming crisis of climate change by helping to **ensure the supply of** vital life staples such as **food, water**, and other basic needs in future shortages caused by climate-change. In a climate-changed future, there is the distinct possibility that supplies of vital life staples may run short, possibly for long periods of time. Droughts are projected to last longer, with water supplies and growing conditions increasingly precarious. Capitalist enterprise could, first of all, provide the **impetus to** finally **reform** a dizzying multitude of **price distortions** that plague water supply and agriculture worldwide. Second, **capitalist enterprise** can **undertake scale production** of some emergent technologies that might alleviate shortages. **Desalination technology** can convert salty seawater into drinkable freshwater.54 A number of environmental and economic issues need to be solved to deploy these technologies at large scales, but in a crisis, **solutions will** be more **likely to present themselves**. A technology that is already being adopted to produce food is the modernized version of old-fashioned greenhouses. The tiny country of the Netherlands, with its 17 million people crowded onto 13,000 square miles, is the second largest food exporter in the world,55 exporting fully three-quarters that of the United States in 2017.56 The secret to Dutch agriculture is its climate-controlled, low-energy green-houses that project solar panel-powered artificial sunlight around the clock. Dutch greenhouses produce lettuce at ten times the yield57 and tomatoes at fifteen times the yield outdoors in the United States58 while using less than one-thirteenth the amount of water,59 very little in the way of synthetic pesticides and, of course, very little fertilizer given its advanced composting techniques. Sustained shortages in a climate-changed future might require that a **capitalist** take hold of **greenhouse growing and expand production** **to feed the masses** that might otherwise revolt. 2.9 **CHOOSE CAPITALISM** Clearly, the job in front of humankind is enormous, complex, and many-faceted. The best hope is to be able to identify certain human impacts that are clearly harmful to the global environment, and to disincentivize them. Getting back to notions of institutions in capitalism, what is crucial is aligning the right incentives with profit-making activity. What capitalism does **so well** — beyond human comprehension — **is coordinate activity** and **send broad signals about scarcity**. Information about a wide variety of environmental phenomena is extremely difficult to collect and process. If a set of environmental taxes can help establish a network of environ-mental prices, then an unfathomably large and complex machinery will have been set in motion in the right direction. Also, because of the need for new scientific solutions to this daunting list of problems**, new science and technology is desperately needed**. **Capitalism is tried and true** in terms of **producing innovation**. Again drawing upon the study of institutions, it is not so much that individuals need a profit-motive in order to tinker, but the prospect of **profit-making has to be present** in order for institutions, including corporations, to devote resources, attention, and energy towards the development of solutions to environmental problems. Corporations can and should demonstrate social responsibility by attempting to mitigate their impacts on the global environment, but a much more conscious push for new knowledge, new techniques, and new solutions are needed. Finally, **the scale of needed change is profound**. Huge networks of infrastructure centered upon a fossil fuel-centered economy must somehow be replaced or adapted to new ways of generating, transmitting, consuming, and storing energy. A global system of feeding seven billion humans (and counting), unsustainable on its face, must be morphed into something else that can fill that huge role. About a billion and a half cars and trucks in the world must, over time, be swapped out for vehicles that must be dramatically different. This is a daunting to-do list, **but look** a bit more **carefully** among the gloomy news. Elon Musk, a freewheeling, pot-smoking entrepreneur shows signs of breaking into not one, but two industries dominated by behemoths with political power. Thanks to California emissions standards, automobile manufacturers have developed cars that emit a fraction of what they did less than a generation ago. Hybrid electric vehicles have thoroughly penetrated an American market that powerful American politicians had tried to cordon off for American manufacturers only. At least two companies have developed meat substitutes that are now widely judged to be indistinguishable from meat, and have established product outposts in the ancient power centers of fast food, McDonald's and Burger King. The tiny country of the Netherlands, about half the size of West Virginia, exports almost as much food as the United States, able to ship fresh produce all the way to Africa. At bottom, **all of these accomplishments** and thousands more **are** and were **capitalist in nature.** While they collectively repre-sent a trifle of what still needs to be accomplished, they were also undertaken without the correct incentives in place, and thus also represent the tremendous **promise of capitalism**.