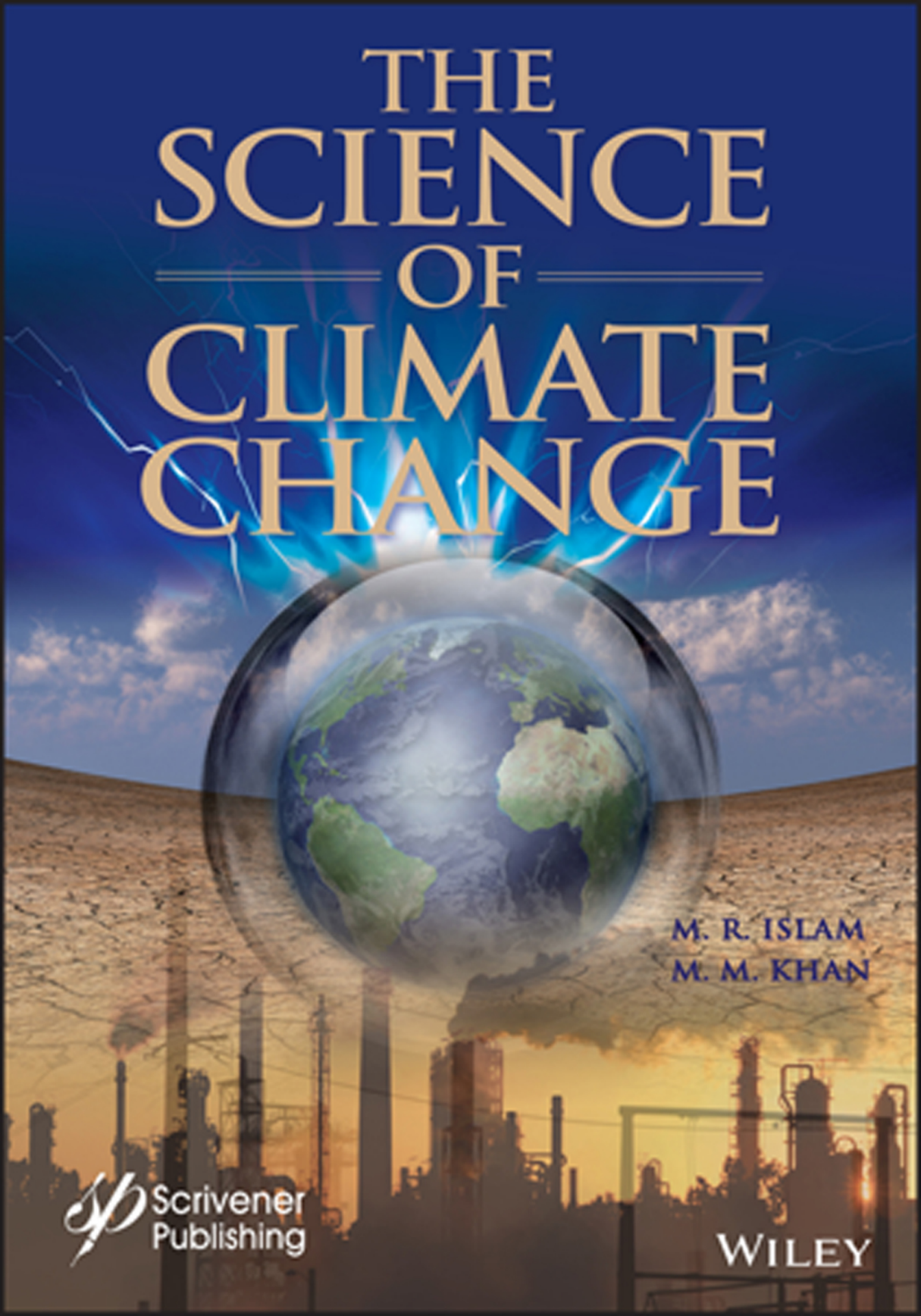
# THE SCIENCE OF CLIMATE CHANGE



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# The Science of Climate Change

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## *Dedication*

*Authors would like to dedicate this book to the scientists of the Islamic golden era that personified research for sake of discovering the truth. Their true scientific approach is dearly missed in today's culture of 'science' of tangibles.*

# Contents

# Foreword

In the name of 'science', there has been a growing trend of dogmatic solutions forced on the world by the ruling elite. Upon the election of President Donald Trump to the most powerful office on the planet, this modus operandi has reached an unprecedented hype. Among the vast majority of the 'scientific' world, there is a natural tendency to mock President Trump, much like they do in liberal states, such as California, New York, etc. For them, anyone advancing any argument against the so-called '97% consensus' is immediately identified as a suspect and climate change denier, and, therefore, is worthy of being intellectually lynched by categorizing him/her as a Trump supporting, MAGA hat-wearing hillbilly. At this point, anything the 'scientist' would say, no matter how egregious, be it manufacturing cow-free burgers and milk or dimming the sun with toxic chemicals, would pass for 'science' while anyone advancing 'alternate' explanation would be ridiculed. This is not a scholarly forum, where real science can survive[1]. As such, this book, titled, "The Science of Global Warming" is a remarkably courageous undertaking. It is no surprise that this book starts with the deconstruction of existing 'settled' science. It exposes the hollowness of New Science in general and climate change hysteria in particular. The book reminds the readership, that it is New Science that has made the following transition in the past and is poised to continue along the same path.

- In the 70s, there was this coming of second ice age;
- In the 80s, acid rain was considered the villain that was ruining the planet earth;
- In the 90s, global warming was said to bring the earth at the brink of the tipping point;
- In the 2000s, climate change was declared real and carbon designated the enemy;
- In the 2010s, engineering the earth began, and the natural ecosystem, carbon, water, sunlight were designated the enemy;
- In 2019, we prepare for the 2020s, in which an apology to acid rain is being offered and the plans are underway with billions of dollars of funding to "dim" the sun with acid and let the entire world wear toxic sunglasses - all funded by universal carbon taxes.

This is the much-dreaded environmental scheme propped up by institutions such as the United Nations. Yet, the science that others have been working with have no avenue to evaluate, let alone critique, the only 'scientific' recourse being promoted. It is as if the world

[1] Kraychik, R., 2019, Greenpeace Founder: Global Warming Hoax Pushed by Corrupt Scientists 'Hooked on Government Grants', *Breitbart*. March 7

has gone insane and cannot fathom the fundamental question as to what is wrong with carbon, water, or sunlight. This book not only asks those questions, but it goes beyond giving satisfactory answers to each of these questions, showing the lunacy of the schemes that promote 'new wave' nuclear energy as the panacea while vilifying natural resources as 'evil'. In a society in which Judges and lawyers cringe at the thought of asking the 'why' questions, medical doctors are utterly clueless about why diseases occur, and scientists are engineers would not touch those questions in fear of losing funding, this book is as revolutionary as it gets. At the end, this book leaves no question regarding the global climate unanswered and recommends fundamental changes that can offer hope for the future. The solutions will not make more money for to do the corporations or tax-happy big governments, but who said those things have anything with proper science? The book lives up to the expectation of the name the 'Science of Climate Change'. You have to read the book to appreciate how real science is different from dogmatic nonsense that we have been indoctrinated to believe as 'science'.

G.V. Chilingarian

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# 1

# Introduction

## 1.1 Opening Statement

The evolution of human civilization is synonymous with how it meets its energy needs. Few would dispute the human race has become progressively more materially advanced with time. Yet, for the first time in human history, an energy crisis has seized the entire globe and the very sustainability of this civilization itself has suddenly come into question. If there is any truth to the claim that humanity has actually progressed as a species, it must exhibit, as part of its basis, some evidence that overall efficiency in energy consumption has improved. In terms of energy consumption, this would mean that less energy is required per capita to sustain life today than, say, 60 years earlier. Unfortunately, exactly the opposite has happened. We used to know that resources were infinite, and human needs finite. After all, it takes relatively little to sustain an individual human life. Things have changed, however, and today we are told, repeatedly: resources are finite, human needs are infinite. What's going on?

Some Nobel Laureates (e.g., Robert Curl) and environmental activists (e.g., David Suzuki) have blamed the entire technology development regime, except certain disciplines of their choosing. For instance, Robert Curl would not see anything wrong with chemicals and David Suzuki would actually make living out of selling solar panels, calling them 'renewable' (it is these panels that guzzle cancer causing $SiO_2$ fume that are far worse than car exhaust). Others have the blamed fossil fuel and chemical industries. It was a common saying over a century ago, that we would run out of coal; therefore, coal needs to be replaced with petroleum. Ever since the politics-related oil crisis of 1970s, we have

heard the declaration that the end of the global reserve is near. It was widely believed that oil price would rise to $200/bbl by 2000 and we must seek an alternate source of energy because petroleum will soon become out of reach. The opposite happened during the Clinton era, with peace dividend due to cessation of the cold war (due to dismantling of the Soviet Union), economy flourished and oil price hovered around $10/bbl. A new crisis had to be invented. Starting from the Clinton era, another concern has been added; that is, the environmental concern. With former Vice President, Al-Gore's newfound contempt for fossil fuel and love for anything not carbon (including nuclear technology, which was curiously synonymous with Tennessee – a state Al Gore[1] once represented), the world started to believe carbon was the enemy. This drumbeat against petroleum continued even during the Bush 43 era and President George W. Bush talked about 'oil addiction' (Islam et al., 2010). Even his most ardent detractors embrace that comment as some sign of deep thinking. Then came the Obama era – the era of contradictions and paradoxes (Brown and Epstein, 2014). If President Clinton gained notoriety by admitting to doing drugs but not inhale, Obama could admit to get 'high' and yet maintain his saintly aura. The Obama era is marked with unprecedented surge in oil and gas production activities that catapulted USA to energy solvency (Islam, 2014), looking to an unprecedented position of net exporter of energy (CNBC, 2018). In a paradoxical move, however, Obama increased investments in so-called renewable projects, painting the US administration as environment-friendly, with the fundamental premise that oil is not sustainable but renewable energies, such as solar, wind, biofuel are. The president who ran on the slogan 'yes we can', invested heavily on promises of a vast network of high-speed rail, a "smart" electric grid, a million electric cars on the roads, a "clean energy economy" creating millions of new green jobs. The 'yes we can' slogan turned out to be 'no he cannot' after spectacular failure of his promises (Editorial, 2017). After spending over $105 billion on a road system he called the "largest new investment in America's infrastructure since President Eisenhower built the Interstate Highway System," the American Society of Civil Engineers graded the state of the nation's overall infrastructure when from a "D" to a "D+." In other words, it went from poor to only slightly less poor. In fact, the Transportation Department reports (USDT, 2018) that highway congestion was worse in 2016 (4 hours 43 minutes) than it was in 2008 (4 hours 20 minutes). It is the same for electric cars that saw heavy subsidies and generous tax breaks only to see a $8 billion investment see only a tiny niche market, subsidized by millions of taxpayers who have no interest in owning one (Editorial, 2017). Similarly, Obama's high-speed rail fantasy that was supposed to take root in 10 regions ended up being a 'California' dream with a price tag of $8 billion in stimulus package and $3.5 billion in grants from the federal government. This is the same California ranked no. 32 in overall ranking among 50 states (USNews, 2018), the same California that became a national disgrace for its 'cruel' and 'inhuman' homelessness crisis (Bendix, 2018). Obama's most spectacular failure was in renewable energy spending. He spent billions of taxpayer dollars subsidizing windmills and solar plants as part of his vision of a "clean energy" future. However, despite his repeated claims about a huge increase in renewable energy production, renewables today make up just 11% of the nation's total energy production, according to the Energy Information Administration. Figure 1.1 shows how it was oil and

[1] Al Gore shared the Nobel Peace Prize with IPCC in 2007 (Schiermeier & Tollefson, 2007)

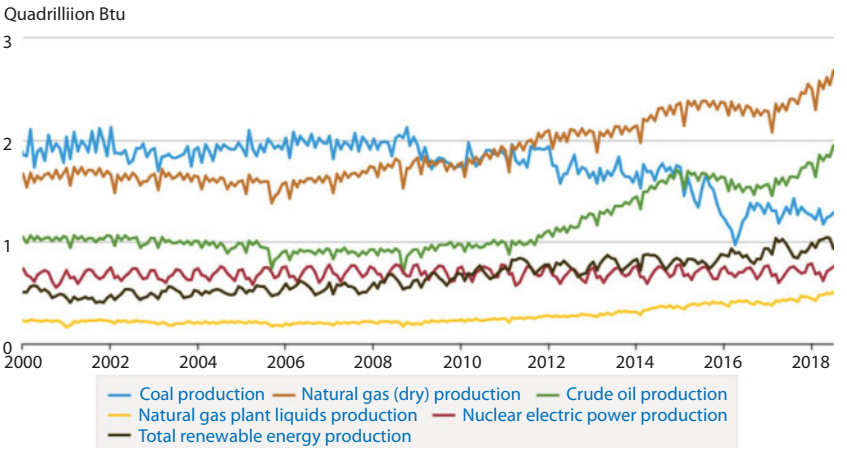


**Figure 1.1** Primary energy production (from EIA, 2018).

**Picture 1.1** This big solar project in Arizona is just one of the large clean power plants enabled by the Energy Department's Loan Program Office. Credit: Courtesy of NRG.

gas production that met the bulk of the energy need of the USA. In mid-1983, the share of energy production comprised of renewables was 11%. The biggest shift in energy under Obama came not from a government program, but from fracking, which vastly expanded the supply of domestic oil and natural gas. But, what all these have to do with the science of climate change?

One would think scientists are the first ones to recognize inherent flaws in political decisions, involving billions of public funding. The sad reality is that scientists have abandoned objective research. In this case of energy policy and climate change strategies, 97% of scientists have pandered the liberal line, that is carbon is the enemy and as long as an energy source is not carbon, we are safe (Nuccitelli, 2018). Before we talk about the 3% who at least opposed the 97%, let us review some of the public reaction to Obama's no-carbon policy. Biello (2015) painstakingly described how Obama's energy policy was actually a 'seed of clean-energy revolution'. Biello proudly displays a picture of a giant collection of 5.2 million solar panels, A blue-black field of 5.2 million solar panels (Picture 1.1) turning 300 megawatts of silicon photovoltaics (PV) into electricity. He (Biello, 2015a) connects to equally glamourous feat of a giant wind farm equipped with wind turbines (Picture 1.2) to green energy, totally oblivious of the facts

**Picture 1.2** Few realize wind turbines are inherently unsustainable and nowhere close to being renewable.

that these technologies are not renewable, efficient (Chhetri et al., 2008) or safe for the environment (Islam et al., 2015). To cap it up, the loans from the U.S. Department of Energy's Loan Programs Office (LPO) is flaunted as if this public fund that made the projects possible is a testimony that the project is a scientific marvel. To be clear, this loan program was attached to innovative technologies, defined as "new or significantly improved technologies as compared with commercial technologies" (with commercial defined as used in three or more other projects over more than five years). Some $16 billion was available before September 2011 on top of the $56 billion already available – all in name of innovative technology. So, one must wonder what great innovation these huge loans were connected to? Those innovations range from the basic layout of solar farms of more than 100 megawatts to storing sunshine in molten salts and using lens to concentrate it and improve photovoltaic efficiency. Translation? As long as it does not involve petroleum, it is innovative. Inherent to all these is the premise, is that anything related to carbon is unsustainable whereas anything related to solar, wind, or so-called 'renewable' is sustainable or 'green'. As pointed out by former President Barack Obama, "There is such a thing as being too late when it comes to climate change," President Barack Obama said in unveiling the administration's Clean Power Plan at the White House on August 3, "The science tells us we have to do more." All of a sudden, a president with law degree sanctifies 'science' and none of the 97% scientists could ask the research questions:

1. What is the long-term consequences of the 'renewable' energy?
2. What is the real cause of global warming?
   Instead of seeking to answer these research questions, the debate now moves on to the phase, where the research question become
3. How the economics of 'renewable' energy can be improved?
4. How can we reduce our 'oil addiction'?

Not surprisingly, the solution becomes Carbon tax, so the 'oil addiction' is minimized and with added revenue more can be spent to offset the poor economy of 'renewable'

energy sources or worse, some absolutely preposterous idea. What could be more preposterous than taxing people to offset so-called renewable energy sources that account for less than 20% of the total energy? Well, it seems scientists lived up to the insanity that would make flat earthers look logical. In 2018, Smith and Wagner came up with the 'brilliant idea' that the solution to global warming is to spray the stratosphere with aerosol, containing sulfates – the very kind that contributed to the current crisis. It is reminiscent of Stephen Hawking's claim that the solution to global crisis that is a fruit of colonization is to colonize the Mars. But, at least Stephen Hawking didn't have an axe to grind. He wasn't waiting to cash in a large grant out of his insane comment. For Smith and Wagner, it is a lucrative business. They propose developing a new, purpose-built high-altitude tanker with substantial payload capabilities. That's a great ticket to instant cash considering that a 15 year span for the spraying project is proposed. These are the scientists that give credibility to politicians, who have been vocal about academic 'corruption' akin to corporate greed[2]. As Sen. Rick Santorum said, "If there was no climate change, we'd have a lot of scientists looking for work. The reality is that a lot of these scientists are driven by the money that they receive," if one consensus that's worth a mention it is the fact that scientists have made funding to be their primary motivator.

The response of the 3% 'disbeliever' scientists have been first denial that global warming exists, then challenge the prospect of replacing fossil fuel with a workable alternative, arguing that the economics of scale offered by fossil fuel cannot be overcome with alternative energy sources. This line of argument buries the possibility of answering pivotal Questions 1 and 2.

This book brings back real science to answer the most important questions regarding climate change. These questions have eluded both sides of the Climate change debate. Because one side of the debate (the 97%) starts off the premise that 'Carbon is the enemy' and this book starts off the premise that carbon is essential to life, this book may appear to be taking side of the 3% 'climate change denier'. This perception is inaccurate. In this book, the mistakes of both sides are corrected and, as such, it opposes both current views of climate change. The only stance the book backs is the pure logic – free from dogmatic assertions. As such, it criticizes all dominant physics and chemistry theories that have been built on illogical, aphenomenal and unnecessary premises. It is, however, found that mainstream scientists have resorted to take a stance that can be considered liberal (anti-Carbon). We see no excuse for such bias other than 'monetary axe to grind'. In this process, economists have played a role in what we call monetizing ignorance or bias. This is not just an economics problem (Islam et al., 2018a), this is also a scientific integrity problem. This book will show how every time the most logical options have been avoided in explaining natural phenomena, instead resorting to dogmatic solutions that would support the desired conclusion. Whenever someone critiqued this process and pointed out obvious fallacies, he/she has been a target of attack by people who have little or no understanding of fundamental processes at play. In that process, even the likes of US President has not been spared (Nuccitelli, 2018). In the meantime, it has become fashionable even to promote nuclear energy pitting against fossil fuel and that too by the likes of Al Gore

[2] US Sen. Rick Santorum recently claimed that climate scientists "are driven by the money that they receive." (See Burke, 2018 for details)

and even Crown Prince of Saudi Arabia (Frantzman, 2018). This book brings back logic and isolates politicking from science and delivers scientific findings in their purest forms.

## 1.2 Summary

Even though petroleum continues to be the world's most diverse, efficient, and abundant energy source, due to "grim climate concerns", global initiatives are pointing toward a "go green" mantra. When it comes to defining 'green', numerous schemes are being presented as 'green' even though all it means is the source of energy is not carbon. In fact the 'left', often emboldened with 'scientific evidence', blames Carbon for everything, forgetting that carbon is the most essential component of plants. The 'right', on the other hand, denies climate change altogether, stating that it is all part of the natural cycle and there is nothing unusual about the current surge in $CO_2$ in the atmosphere. Both sides ignore the real science behind the process. The left does not recognize the fact that artificial chemicals added during the refining process make the petroleum inherently toxic.

This book is aimed at examining science behind global warming and climate change. Avoiding the conventional approach of looking into 'greenhouse gases' that are recognized to be from anthropogenic activities, this book looks beyond the usual suspect of fossil fuel. By using a detailed pathway analysis, this book identifies flaws of various energy production schemes, including petroleum resource development. The source of alteration of $CO_2$ quality that renders the $CO_2$ unabsorbable by the ecosystem is identified for cases of forest fire, agricultural activities, fossil fuel as well as biofuel. The nature of $CO_2$ emission from various processes, including biomass (during the agricultural process and beyond) is analyzed and decisions made as to what role it will play to the global scenario. $CO_2$ emission data from the pre-industrial age all the way to current era are then analyzed, showing clear correlation between $CO_2$ concentration in the atmosphere with 'corrupt' $CO_2$ emission, which itself was a function of the fuel source, the path it travels, isotope numbers, and age of the fuel source. Various energy technologies are ranked based on their long-term sustainability. It is shown that petroleum is the most environmentally benign among the energy sources investigated, followed by biofuel, solar, wind, and nuclear. When the artificial chemicals are replaced with natural substitutes at various phases of petroleum processing, petroleum wastes become useful materials that can be recycled in the ecosystem in a zero-waste mode. Not only the by-products, including $CO_2$ emissions, are benign, they are in fact beneficial to the environment. Each of these wastes can then become raw materials for value added new products. Finally the paper offers guidelines for 'greening' of petroleum operations as well as the economics of zero-waste petroleum production and long-term environmental sustainability.

## 1.3 Chapter 2: State-of-the Art of the Climate Change Debate

Politics has never been separated from science – at least not in the post-RCC (Roman Catholic Church) Europe. Of course, politics has been controlled by the Empire or the

Church, but when it comes to science, it is entirely controlled by politics. Many argued that for reasons unknown and unjustified scientists are capable of looking at facts and impart objective judgement without regards to their political belief. As pointed out by Jaan Islam (2018), this arises from fundamental illogical assumption that scientists (or any human) can dissociate his/her conscience from any influence of the outside, particularly the one that will determine his/her financial status in the near future. This internal conflict was blown open during the Enron scandal of the 2003 and following years. In following years all the way through Obama's second term, scientists took an unusual dip in terms of abandoning the path of objectivity. Each research project funded by the government and each commercial project sponsored with government blessing had invariably have the starting point that Carbon is the source of 'vile' and alternate energy sources were inherently beneficial. However, 97% of the scientists argued in favour of the liberal agenda whereas the 3% argued against the liberal agenda (Bolton, 2016). Once this premise is established, nothing can stop scientists from making statements, such as the one made by Sarah A. Green, a chemistry professor at Michigan Tech who said, "What's important is that this is not just one study -- it's the consensus of multiple studies" (quoted by Bolton, 2016). This is not a new paradigm but it was a paradigm Al Gore perpetrated decades ago, long before the climate debate even started. More significantly, this immediately gained traction when Democrats threw their support for the March for Science, asking Americans to vote climate change deniers out of office (Delk, 2018). The New Crusade began and new slogans became: "Accept reality", "Ignoring experts is stupid", "Climate denial is very expensive" – all making headlines in the mainstream media and popular science magazines.

In justifying each side's position, they did not correct each-others' fundamental premises. As a result, the debate moved to a different topic and that is Scientists vs. Climate Change deniers. Of course, numerous publications purporting to discover the real mindset that make people so fixated on their position, some even suggesting deep divergence in psyche behind liberal and conservative stances (Laber-Warren, 2012). In all practicality, there was no science to be investigated as it has been universally established that climate change is the reality and carbon is the enemy. Then came the Trump phenomenon. No other president in US history exposed the role of politics in every affair, including science. In science, the biggest exposé was Trump's energy policy that has been opposed by the Scientific community and even the judiciary has become involved. There has been this incessant ridicule that Trump has no regard for real science (Nuccitelli, 2018) in line with Nobel laureate economists' joint concern that Trump economy would be an utter failure or even the great concern of psychologists that Trump is mentally incompetent to govern (Islam, 2018a,b). He was also ridiculed for withdrawing from the Paris Agreement. In the latest case, involving the controversial Keystone XL pipeline project, a federal judge temporarily blocked the construction on the basis that selective facts were chosen to grant a permit for the 1,200 mile long project designed to connect Canada's oil sands fields with Texas's Gulf Coast refineries (Barbash et al., 2018). Clearly, science has failed to deliver objective truth, let alone universal truth and politics has become the gatekeeper of research outcomes and 'facts'.

Chapter 2 reveals the nature of climate change debate. Both sides of the debate are exposed and their fundamental premises deconstructed.

## 1.4 Chapter 3: Forest Fires and Anthropogenic $CO_2$

Global warming is synonymous with heat. In a natural system, fire is the most tangible source of temperature. It is no surprise that wildfires sweeping across various parts of North America, Europe and even Siberia have caught attention of the scientists, who are inclined to find any justification for their climate change theory. These fires are not only wreaking local damage and sending choking smokes, they are also affecting the climate itself in important ways that will have long-lasting impacts. Scientists see these wildfires as the source of carbon dioxide and other greenhouse gases. The underlying assumption is that these forest fires damage forests, thus removing $CO_2$ from the air. In addition, they assume that the soot and other aerosols into the atmosphere that arise from wildfires will behave like artificial aerosols and carcinogenic chemicals, thus rendering the climate more adverse to human inhabitants. Even though until now it is recognized that the leading cause of global warming is overwhelmingly the burning of fossil fuels, forest fires are considered to be making the situation worse. In essence, global warming lengthens the fire season, drying and heating the forests, thus creating an environment more conducive to wildfires, a vicious cycle with the results of warming produce yet more warming. In fact, every time there is a wildfire (Picture 1.3 and Picture 1.4) , scientists become busy writing yet another research proposal in search of

**Picture 1.3** The Woolsey Fire raged near the Ventura-L.A. County line, burning about 2,000 acres and forcing mandatory evacuations in several communities. Chatsworth West Hills area, California (Nov. 8, 2018).

**Picture 1.4** Bush fire burns near Rocketdyne complex Simi Hills, California (Nov. 8, 2018).

solutions to mitigate global warming. It is truly amazing how scientists do not see wildfires as part of the natural process and further conflate this fire with artificial fire, for instance the ones arising from fireworks. Yet, for millennia, humanity has seen wildfires as part of the natural process and considered it a blessing similar to floods that help renew the biological system. Indeed, changes in climate, atmospheric carbon dioxide concentration and fire regimes have been occurring for millennia in the global boreal forest without affecting the overall frequency of forest fires.

Instead, scientists spend their time quantifying $CO_2$ emitted from wildfires and assign those billions of tons of $CO_2$ per year to the overall $CO_2$ imbalance of the atmosphere. Immediately, this is taken up by researchers from both sides of the climate change debate. One side argues that wildfires release as much CO2 as cars, therefore that there is no point of even trying (Thompson, 2007). The other side argues that by introducing carbon-free cars, we can reduce the greenhouse effect to half. In the mean time, scientists look on as if they have no clue as to how to solve this puzzle (Bond-Lamberty et al., 2007). The research focus has been on assessing quantitatively the effect of changing environmental conditions on the net boreal forest carbon balance without regards to the nature of $CO_2$ emitted from the forest fires. A great deal of publications have emerged, all confirming the same conclusion that was embedded in the first premise.

Chapter 3 unravels the mysteries of forest fires and their link to global warming. Dominant theories are deconstructed and the science of real fire is presented.

Thompson, A., 2007, Wildfires Release as Much $CO_2$ as Cars, *Live Science*, Oct. 31.

Bond-Lamberty, B. et al., 2007, Fire as the dominant driver of central Canadian boreal forest carbon balance, *Nature*, volume 450, pages 89–92.

## 1.5 Chapter 4: Role of Agricultural Practices on Climate Change

Climate change and global warming have been connected to agriculture and food production only through evaluation of impacts on crop production. The application of agriculture of crop involving biofuels has been considered to be entirely positive as an alternative to fossil fuel, which is the declared target of any global warming mitigation mission. Yet, there is widespread acceptance that climate change and agriculture are interrelated processes, both of which take place on a global scale. Factors that have been studied with relation to climate change are changes in average temperatures, rainfall, climate extremes, changes in pests and diseases, in atmospheric carbon dioxide, ground-level ozone concentrations; in the nutritional quality of some foods; and in sea level (Vermeulen et al., 2012). The most important link has been to food security and how it relates to economic aspect of farming. Many initiatives have been undertaken around the world, all missing one crucial aspect, that is how the use of chemical fertilizer, pesticide, and the latest use of GMO can impact the $CO_2$ that the vegetation breathe out to the atmosphere or how these chemicals affect the photosynthesis

process. Not a single research study addresses the analysis of the entire pathway followed by a crop either through its consumption or its processing for biofuels. Not a mention has been made regarding the negative impact of chemicals on human health and related long-term consequences. Instead of answering these pivotal questions, the focus of the world scientific community has been to act as the rubber stamp in support of global policy-linked research, pontificating the third world about how to survive the onslaught of global warming – a phenomenon that has little to do with the third world.

Chapter 4 answers the questions that have not been answered before. It presents the delinearized history of agricultural practices and how they can impact the $CO_2$ concentration of the atmosphere, thus contributing to the climate change. It is shown that the practices involving agriculture can affect the global $CO_2$ accumulation far more intensely than the burning of fossil fuels.

## 1.6 Chapter 5: Role of Biofuel Processing in Creating Global Warming

Ever since the Clinton era, biofuels have been considered to be sustainable alternatives to petroleum products. It has become a foregone conclusion that biofuels are inherently sustainable (hence the term 'renewable') and the debate moves on to how to produce biofuels cheaply. Because few are accustomed to questioning the first premise of any of these conclusions, even the ardent supporters of the petroleum industry find merit in this conclusion. Considerable funds have been spent in developing biofuel technology, and even the mention of negative impacts of food (e.g., corn) being converted into fuel was considered to be anti-civilization (Islam et al., 2010). The argument put forward is that plant and vegetable oils and animal fats are renewable biomass sources. This argument follows other supporting assertions, such as the idea that biodiesel represents a closed carbon dioxide cycle because it is derived from renewable biomass sources. Biodiesel has a lower emission of pollutants compared to petroleum diesel. In addition, it is biodegradable, and its lubricity extends engine life (Kurki et al., 2006) and contributes to sustainability (Kurki et al., 2006). Biodiesel has a higher Cetane number than diesel fuel, no aromatics, no sulfur, and contains 10–11% oxygen by weight (Canakci 2007). The negative aspects of biofuels are expressly limited to physical properties that are not amenable to instant combustion, as required in a combustion engine, its cost, and its use of edible sources. Based on this argument, alarms were sounded when oil prices dropped in fall of 2008, as though a drop in petroleum fuels would kill the "environmentally friendly" biofuel projects, thereby killing the prospect of a clean environment. As a remedy to this unsubstantiated and aphenomenal conclusion, waste cooking oils and non-edible oils are promoted to take care of the economic concerns.

Not a single study thoroughly investigated the effect of chemical fertilizer, pesticide, or GMO on the long-term impact of the $CO_2$ that would eventually be produced upon combustion of the biofuel. Not a single conclusive statement has been made in assessing the impact of the chemicals used to process biofuel. Both of these questions are answered in Chapter 5. It is shown that the process currently followed to refine vegetable oil to produce biofuel can lead to permanent contamination of biofuels.

## 1.7 Chapter 6: Role of Refining on Climate Change

Refining has been synonymous with value addition, efficiency, and outright civility of the modern society. No fossil fuel today sees combustion in its crude form, always being subject to refining, processing with chemicals that are prepared separately and almost always artificially (as in synthetic chemicals or catalysts). It is no surprise that the most ardent supporters of climate change advocacy do not hold particular grudge against refiners or chemical industries that process crude oil into useable products. As for the 'climate change deniers', they see nothing different about the refining process from simple usage of a natural technology that is advancing the efficiency. They wonder, this must be a way to reduce their carbon footprint. This stance is visible in all walks of life. For instance, consider the headline: Refiners Aren't To Blame For Climate Change (Rapier, 2018). The arguments made in support of such headline is: refiners did not cause climate change because all they did is to improve the efficiency of burning, how could that be harmful. In fact, a common argument is to say, if refining is harmful, why not pharmaceutical products or even agricultural products? After all, they are also using chemicals (mostly the same chemicals as the refining industry). New Science has no argument against this defence of the refining industry.

Chapter 6 takes a fresh approach that looks at each of the major chemicals used during the refining process and evaluates the long-term impact of the chemicals. This chapter helps see how changes in trace elements can profoundly affect the CO2 character, thereby rendering it unabsorbable by the ecosystem.

## 1.8 Chapter 7: Scientific Characterization of Petroleum Fluids

Crude oil and natural gas are part of the global ecosystem (Figure 1.2). Because all systems in the global climate system are connected, adding heat energy causes the global climate as a whole to change. If this source of heat is artificial, it will have a different impact from the one in its natural state. It is the artificial component that creates

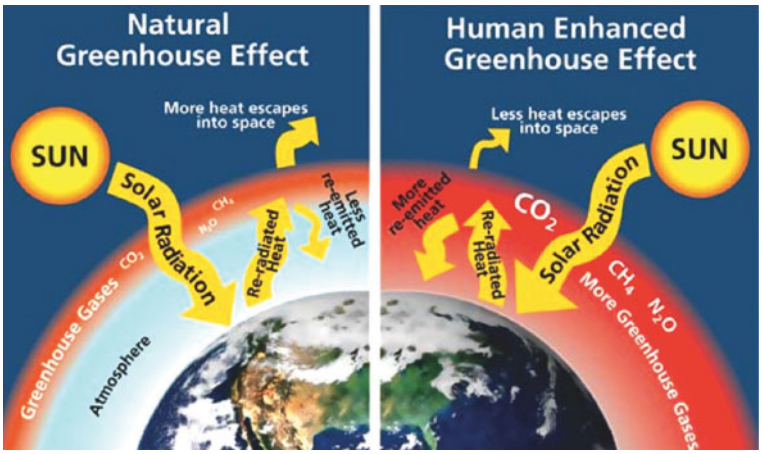


**Figure 1.2** Heat is energy and when energy is added to any system, changes occur.

imbalance. Yet, today all of produced oil and gas are subject to refining or processing with the aim of producing fuel that can be burned to produce energy. This refining or processing uses exclusively artificial chemicals, no matter what the crude form of the petroleum is. These products can be tar sand, heavy oil, light oil, or natural gas, they all end up being fuel first, leaving behind residues that form the feedstock for chemical products with a wide range of applications. Curiously, the heaviest part of the crude petroleum products becomes immune to climate change criticism as the main target is the fuel component that is readily burnt, instead of being a feedstock for the plastic, pharmaceutical, and numerous other useful products. As such, no study has focused on the effect of characterizing petroleum fluids in order to custom design applications. Yet, such characterization can have profound impact on both the currently estimated world reserve as well as on climate change itself.

Chapter 7 presents a comprehensive scientific characterization of petroleum fluids and shows how the world petroleum reserve can be expanded vastly through proper characterization and appropriate applications. Refining and other processing means are proposed that would allow for sustainable application of petroleum and reverse the current global warming trends.

## 1.9 Chapter 8: Delinearized History of Climate Change Hysteria

When G. W. Bush laid out his action plan to declare 'war on terror', he used the now infamous rhetoric 'you are either with us or against us'. Not a single western state questioned his motive and it was unanimously agreed that the war on terror must start with Afghanistan. When it comes to politics, people seem to have very short memory. How could they forget what happened to Socrates, who was also condemned by the 500-man jury? Some fantasize that such nonsense does not apply to science, particularly not after New Science was launched, allegedly after shedding the lunacy of religious Dogma. The 'civilized' version certainly is enlightened. After all, they are not blinded with faith and other inconveniences that obstructed the real inquisitive nature of humans. These people are either not paying attention to facts or are incapable of seeing anything beyond their first premise.

Marc Morano (2018), the author of the book: *The politically incorrect guide to climate change* circulated a video with over five million viewers on Facebook, he was ridiculed as the real-world fossil fuel industry version of Nick Naylor (Nucitelli, 2018a). The title of the Guardian article read: Facebook video spreads climate denial misinformation to five million users Nucitelli, himself a faithful believer of Climate change agenda,[3] points out that Morano was working for Rush Limbaugh, followed

[3] Dana Nuccitelli is an environmental scientist at a private environmental consulting firm in the Sacramento, California area. He has made a career out of promoting 'the 97% consensus'.


**Figure 1.3** The propagandizing of consensus.

by a job at Cybercast News Service where he launched the 'Swift Boat' attacks on 2004 Democratic presidential candidate John Kerry. In 2006, Morano was further discredited through his association with Oklahoma Republican Senator Jim Inhofe, who was himself ridiculed for his characterization of global warming as "the greatest hoax ever perpetrated on the American people." So, what evidence does Nucitelli provide in support of such vitriol attack and characterize Morano as the perpetrator of Fakenews? Nucitelli comes up with the fact that as early as 2004, the consensus was 100%. As shown in Figure 1.3, each consensus study have been reporting over 90% consensus. At no time, it occurred to them that consensus has no meaning when it comes to establishing veracity of a natural occurrence. It is clear that the only question that is allowed to ask is as hysterically posed by Griffin (2015): *Can Civilization Survive the $CO_2$ Crisis*? It is already decided that $CO_2$ is the enemy and the debate must revolve around how much more we can extract from the unsuspecting public to feed the scientists who can foment more fear as the Establishment sells another round of fear mongering.

Chapter 8 makes a bold assessment of the Climate Science researchers and propaganda con artists, ranging from politicians to scientists. A delinearized history brings forth key questions that needed to be answered but for some reason no scientist dared ask, instead debating over peripheral issues. This chapter exposes the reasons behind the incessant propaganda that has become the trademark of climate change activism. By analysing each historical landmark events, the chapter shows how scientists failed to even ask the questions that would have the faintest chance to expose the hollowness of the fundamental premises they promoted as facts. This sets stage for the next chapter that shows the motivation behind the 'science' of climate change hysteria.

## 1.10 Chapter 9: The Monetization the Climate Science

Hypocrisy aside, New Science has been solely motivated by financial gains and that too in the shortest possible timeframe (Islam et al., 2018a). Economics, in that case, has become the driver of the inanity that has become the hallmark of New Science. This is perhaps nothing new, what is new during the Trump era is the exposure of the sinister

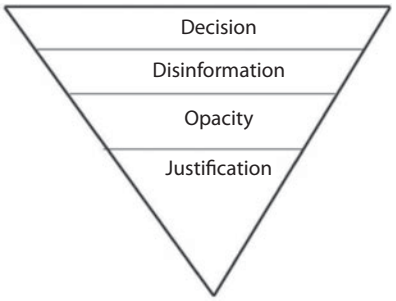


**Figure 1.4** This is the inevitable outcome of the 'original' sin model that reverses the cognition process, and thereon corrupts the entire humanity. Unfortunately, there is no exception that we can cite in the entire history of modern Europe (From Khan and Islam, 2016).

forces that once had the protection of crying 'conspiracy theory'. As the German economist, John Komlos, famously said, "The media is inundated with pundits analyzing the unexpected rise of demagoguery. I would like to add my own: the establishment's utter loss of credibility. Abraham Lincoln's warning, 'you cannot fool all of the people all of the time,' has now come back to haunt them with a vengeance" (Parramore, 2016). After Trump, the world has come to know how the mainstream media, political establishment, and the financial establishment have been working together to influence science and economics simultaneously, feeding back the narration that the Establishment is always right (Islam et al., 2018). The model used in making policies is the one shown in Figure 1.4. In this model, the decision is made before collecting facts, let alone turning facts into useful information that eventually leads to knowledge-based decision making. With this model, there is no decision making outside of the policy room and in this process, scientists and journalists work toward creating opacity and giving justification to the decision, in turn contributing to propagandizing. In the context of climate change, the decision is to extract carbon tax and after that everything else is cursory. This is nothing but the secular version of the Dogma model from the dark ages of the Roman Catholic Church.

This is what we call the "trinity model" in which the original sin doctrine gave birth to the trinity model of religion. This trinity model, based on a lack of appreciation for humanity and involvement in the material (societal, political economic) sphere of life, fuelled the alternative material trinity that developed: the government, society, labour, all based on devotion to money. Nothing supports the 'money god' devotion better than the climate change 'crisis'. The recent proclamation (synchcronized with Economics Nobel prize given to 'Climate change' economist and a world bank former operative) of IPCC that universal carbon tax feeds right into this corporate culture that continues to create economic extremism (Islam et al., 2018a). In the mean time, New Times (2018) headline reads: "Climate Change will take a bite out of US Economy." US under the leadership of President Trump, of all places, is expected to succumb to this grand scheme. Of course, anyone non-conforming to this new Dogma will be quickly marginalized, as evident from CNN headlines that continue to ridicule President Trump and even otherwise timid Canadian press (CBC, 2018): chimes in: "Trump rejects findings of U.S. government climate change report." Today, there is no