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Climate Changes Due To the Global Warming

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Abstract
In this work we presented the factors that cause climate changes due to the global warming.

Introduction
Global warming or climate change is an increase in surface temperature medium in the world with the increasing amount of carbon dioxide, methane and some other gases in the atmosphere. These gases known as greenhouse gases because they contribute to the Earth's atmosphere heating surface, a phenomenon known as global warming. Observed increase in average air temperature since the mid-twentieth century, with its continued rising, with increased surface temperature of the Earth's temperature by 0.74 ± 0.18 °F (1.33 ± 0.32 ° F) over the past century. The Intergovernmental Panel on Climate Change concluded that greenhouse gases resulting from human activities are responsible for most of the temperature rise observed since the mid-twentieth century, while the natural phenomena such as solar variation and volcanoes have a small warming effect since ages by the industry until 1950 and the impact of small cooled after that.Temperature today is nearly double the rate before the 200-year-old. The causes of global warming are different; some scientists say that pollution is the main cause, while others say that it has changed in nature. There are several theories as to why this increase. Expected to increase the degree of the world's surface temperature by 1.4 ° to 5.8 ° Celsius from 1990 to 2100, the rate of the surface of the world's degree is now 0.6 ° Celsius.

1. Industry in United State
The United States is the world's largest national economy in nominal terms and second largest according to purchasing power parity (PPP), representing 22% of nominal global GDP and 17% of gross total trade amounted to $4.93T in 2012. Of the world's 500 largest companies, 128 are headquartered in the US. The United States has one of the world's largest and most influential financial markets. The New York Stock Exchange is by far the world's largest stock exchange by market capitalization. Foreign investments made in the US total almost $2.4 trillion, while American investments in foreign countries total over $3.3 trillion. The economy of the U.S. leads in international ranking on venture capital and Global Research and Development funding. Consumer spending comprises 71% of the US economy in 2013.The United States has the largest consumer market in the world, with a household final consumption expenditure five times larger than Japan's. The labor market has attracted immigrants from all over the world and its net migration rate is among the highest in the world. The U.S. is one of the top-performing economies in studies such as the Ease of Doing Business Index, the Global Competitiveness Report, and others.The US economy went through an economic downturn following the financial crisis of 2007–08, with output as late as 2013 still below potential according to the Congressional Budget Office. The economy, however, began to recover in the second half of 2009, and as of November 2015, unemployment had declined from a high of 10% to 5%.In December 2014, public debt was slightly more than 100% of GDP. Domestic financial assets totaled $131 trillion and domestic financial liabilities totaled $106 trillion[1,2].

Arms industry : The arms industry, also known as the military industry or the arms trade, is a global business responsible for the manufacturing and sales of weapons and military technology and equipment. It consists of a commercial industry involved in the research and development, engineering, production, and servicing of military material, equipment, and facilities. Arms-producing companies, also referred to as defense contractors or as the military industry, produce arms mainly for the armed forces of states. Departments of government also operate in the arms industry, buying and selling weapons, munitions and other military items. Products include guns, artillery, ammunition, missiles, military aircraft, military vehicles, ships, electronic systems, and more. The arms industry also provides other logistical and operational support. Stockholm International Peace Research Institute (SIPRI) estimated in 2012 that 2012 military expenditures were roughly 1.8 trillion United States dollars.[1] This represents a relative decline from 1990 when military expenditures made up 4% of world GDP. Part of the money goes to the procurement of military hardware and services from the military industry. The combined arms sales of the top 100 largest arms-producing companies amounted to an estimated $395 billion in 2012 according to SIPRI. In 2004 over $30 billion were spent in the international arms trade (a figure that excludes domestic sales of arms). According to SIPRI, the volume of international transfers of major weapons in 2010–14 was 16 per cent higher than in 2005–2009. The five biggest exporters in 2010–2014 were the United States, Russia, China, Germany and France, and the five biggest importers were India, Saudi Arabia, China, the United Arab Emirates (UAE) and Pakistan.

Many industrialized countries have a domestic arms-industry to supply their own military forces. Some countries also have a substantial legal or illegal domestic trade in weapons for use by its citizens. Illegal trade in small arms occurs in many countries and regions affected by political instability. The Small Arms Survey estimates that 875 million small arms circulate worldwide, produced by more than 1,000 companies from nearly 100 countries. Contracts to supply a given country's military are awarded by governments, making arms contracts of substantial political importance. The link between politics and the arms trade can result in the development of what U.S. President Dwight D. Eisenhower described as a military-industrial complex, where the armed forces, commerce, and politics become closely linked, similarly to the European defiance procurement. Various corporations, some publicly held, others private, bid for these contracts, which are often worth many billions of dollars. Sometimes, as with the contract for the international Joint Strike Fighter, a competitive tendering process takes place, with the decision made on the merits of the designs submitted by the companies involved. Other times, no bidding or competition takes place.

Iron and steel-making:Steel is an alloy of iron and other elements, primarily carbon, that is widely used in construction and other applications because of its high tensile strength and low cost. Steel's base metal is iron, which is able to take on two crystalline forms (allotropic forms), body centered cubic (BCC) and face centered cubic (FCC), depending on its temperature. It is the interaction of those allotropes with the alloying elements, primarily carbon, that gives steel and cast iron their range of unique properties. In the body-centred cubic arrangement, there is an iron atom in the centre of each cube, and in the face-centred cubic, there is one at the center of each of the six faces of the cube. Carbon, other elements, and inclusions within iron act as hardening agents that prevent the movement of dislocations that otherwise occur in the crystal lattices of iron atoms.The carbon in typical steel alloys may contribute up to 2.1% of its weight. Varying the amount of alloying

elements, their presence in the steel either as solute elements, or as precipitated phases, retards the movement of those dislocations that make iron comparatively ductile and weak, and thus controls its qualities such as the hardness, ductility, and tensile strength of the resulting steel. Steel's strength compared to pure iron is only possible at the expense of iron's ductility, of which iron has an excess.Steel was produced in bloomery furnaces for thousands of years, but its extensive use began after more efficient production methods were devised in the 17th century, with the production of blister steel and then crucible steel. With the invention of the Bessemer process in the mid-19th century, a new era of mass-produced steel began. This was followed by Siemens-Martin process and then Gilchrist-Thomas process that refined the quality of steel. With their introductions, mild steel replaced wrought iron.

Further refinements in the process, such as basic oxygen steelmaking (BOS), largely replaced earlier methods by further lowering the cost of production and increasing the quality of the product. Today, steel is one of the most common materials in the world, with more than 1.3 billion tons produced annually. It is a major component in buildings, infrastructure, tools, ships, automobiles, machines, appliances, and weapons. Modern steel is generally identified by various grades defined by assorted standards organizations[3,4].

2. Industry in China

Industry is 72.8% of China's gross domestic product (GDP) in 2005. Industry (including mining, manufacturing, construction, and power) contributed 46.8 percent of GDP in 2010 and occupied 27 percent of the workforce in 2007. As of 2015, the manufacturing industrial sectors contribute 40% of China's GDP. The manufacturing sector produced 44.1 percent of GDP in 2004 and accounted for 11.3 percent of total employment in 2006. China is the world's leading manufacturer of chemical fertilizers, cement, and steel. Prior to 1978, most output was produced by state-owned enterprises. As a result of the economic reforms that followed, there was a significant increase in production by enterprises sponsored by local governments, especially townships and villages, and, increasingly, by private entrepreneurs and foreign investors, but by 1990 the state sector accounted for about 70 percent of output. By 2002 the share in gross industrial output by state-owned and state-holding industries had decreased with the state-run enterprises themselves accounting for 46 percent of China's industrial output. In November, 2012 the State Council of the People's Republic of China mandated a "social risk assessment" for all major industrial projects. This requirement followed mass public protests in some locations for planned projects or expansions.

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Iron and steel-making: Concomitant with automotive production and other steel-consuming industries, China has been rapidly increasing its steel production. Iron ore production kept pace with steel production in the early 1990s but was soon outpaced by imported iron ore and other metals in the early 2000s. Steel production, an estimated 140 million tons in 2000, rose to more than 420 million tons by 2007.Before the first five-year plan (1953–57), China had only one major steel center— Anshan, in the northeast—and several minor ones. All these produced 1.93 million tons of pig iron and 1.35 million tons of steel in 1952. By 1995, China was producing 92,970 million tons of crude steel and 101,700 million tons of pig iron. China had one trillion tons of confirmed coal reserves and an estimated five trillion tons of coal reserves and 48.7 billion tons of iron ore in 2000. Anshan continues to be the hub of the industry, but other huge steel complexes have been constructed at Baotou, Benxi (about 50 km east of Anshan), Taiyuan, Wuhan, and Ma'anshan (near Nanjing).

Automobile: An example of an emerging heavy industry is automobile manufacture, which has soared during the reform period. In 1975 only 139,800 automobiles were produced annually, but by 1985 production had reached 443,377, then jumped to nearly 1.1 million by 1992 and increased fairly evenly each year up until 2001, when it reached 2.3 million. In 2002 production rose to nearly 3.3 million and then jumped again the next year to 4.4 million. Domestic sales have kept pace with production. After respectable annual increases in the mid- and late 1990s, sales soared in 18 the early 2000s, reaching 3 million automobiles sold in 2003. With some governmental controls in place, sales dipped to 2.4 million sold in 2004.Sales automobiles and vans reached 13 million in 2010. So successful has China’s automotive industry been that it began exporting car parts in 1999. China began to plan major moves into the automobile and components export business starting in 2005. A new Honda factory in Guangzhou was being built in 2004 solely for the export market and was expected to ship 30,000 passenger vehicles to Europe in 2005. By 2004, 12 major foreign automotive manufacturers had joint-venture plants in China. They produced

a wide range of automobiles, minivans, sport utility vehicles, buses, and trucks. In 2003 China exported US$4.7 billion worth of vehicles and components, an increase of 34.4 percent over 2002. By 2004 China had become the world's fourth largest automotive vehicle manufacturer.

3.Greenhouse Gas

A **Greenhouse Gas** (sometimes abbreviated **GHG**) is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone. Without greenhouse gases, the average temperature of Earth's surface would be about −18 °C (0 °F). rather than the present average of 15 °C (59 °F). In the Solar System, the atmospheres of Venus, Mars and Titan also contain gases that cause a greenhouse effect.Human activities since the beginning of the Industrial Revolution (taken as the year 1750) have produced a 40% increase in the atmospheric concentration of carbon dioxide, from 280 ppm in 1750 to 400 ppm in 2015. This increase has occurred despite the uptake of a large portion of the emissions by various natural "sinks" involved in the carbon cycle. Anthropogenic carbon dioxide (CO_2) emissions (i.e. emissions produced by human activities) come from combustion of carbon-based fuels, principally coal, oil, and natural gas, along with deforestation, soil erosion and animal agriculture. It has been estimated that if greenhouse gas emissions continue at the present rate, Earth's surface temperature could exceed historical values as early as 2047, with potentially harmful effects on ecosystems, biodiversity and the livelihoods of people worldwide. Recent estimates suggest that on the current emissions trajectory the Earth could pass a threshold of 2°C global warming, which the United Nations' IPCC designated as the upper limit for "dangerous" global warming, by 2036[7].

4. Gases in Earth's atmosphere

Non-greenhouse gases:The major atmospheric constituents, nitrogen (N_2), oxygen (O_2) and argon (Ar), are not greenhouse gases because molecules containing two atoms of the same element such as N2 and O_2 and monatomic molecules such as argon (Ar) have no net change in the distribution of their electrical charges when they vibrate and hence are almost totally unaffected by infrared radiation. Although molecules containing two atoms of different elements such as carbon monoxide (CO) orhydrogen chloride (HCl) absorb infrared radiation, these molecules are short-lived in the atmosphere owing to their reactivity and solubility. Therefore, they do not contribute significantly to the greenhouse effect and usually are omitted when discussing greenhouse gases.

Greenhouse gases: Atmospheric absorption and scattering at different wavelengths of electromagnetic waves. The largest absorption band of carbon dioxide is in the infrared.Greenhouse gases are those that absorb and emit infrared radiation in the wavelength range emitted by Earth. In order, the most abundant greenhouse gases in Earth's atmosphere are:

- Water vapor (H_2O)
- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Ozone (O_3)
- Chlorofluorocarbons (CFCs)

Atmospheric concentrations of greenhouse gases are determined by the balance between sources (emissions of the gas from human activities and natural systems) and sinks (the

removal of the gas from the atmosphere by conversion to a different chemical compound). The proportion of an emission remaining in the atmosphere after a specified time is the "airborne fraction" (AF). More precisely, the annual airborne fraction is the ratio of the atmospheric increase in a given year to that year's total emissions. Over the last 50 years (1956–2006) the airborne fraction for CO_2 has been increasing at 0.25 ± 0.21%/year.

Contribution of clouds to Earth's greenhouse effect: The major non-gas contributor to Earth's greenhouse effect, clouds, also absorb and emit infrared radiation and thus have an effect on radiative properties of the greenhouse gases. Clouds are water droplets or ice crystals suspended in the atmosphere.

Impacts on the overall greenhouse effect: analyzed how individual components of the atmosphere contribute to the total greenhouse effect. They estimated that water vapor accounts for about 50% of Earth's greenhouse effect, with clouds contributing 25%, carbon dioxide 20%, and the minor greenhouse gases and aerosols accounting for the remaining 5%. In the study, the reference model atmosphere is for 1980 conditions .The contribution of each gas to the greenhouse effect is affected by the characteristics of that gas, its abundance, and any indirect effects it may cause. For example, the direct radiative effect of a mass of methane is about 72 times stronger than the same mass of carbon dioxide over a 20-year time frame but it is present in much smaller concentrations so that its total direct radiative effect is smaller, in part due to its shorter atmospheric lifetime. On the other hand, in addition to its direct radiative impact, methane has a large, indirect radiative effect because it contributes to ozone formation. Shindell et al. (2005) argue that the contribution to climate change from methane is at least double previous estimates as a result of this effect. When ranked by their direct contribution to the greenhouse effect, the most important are:

Compound	Formula	Concentration in atmosphere (ppm)	Contribution (%)
Water vapor and clouds	H_2O	10–50,000(A)	36–72%
Carbon dioxd	CO_2	~400	9–26%
Methane	CH_4	~1.8	4–9%
Ozone	O_3	2–8 (B)	3-7%

Air pollution: **Air pollution** is the introduction of particulates, biological molecules, or other harmful materials into Earth's atmosphere, causing diseases, allergies, death to humans, damage to other living organisms such as animals and food crops, or the natural or built environment. Air pollution may come from anthropogenic or natural sources. The atmosphere is a complex natural gaseous system that is essential to support life on planet Earth.Indoor air pollution and urban air quality are listed as two of the world's worst toxic pollution problems in the 2008Blacksmith Institute World's Worst Polluted Places report. According to the 2014 WHO report, air pollution in 2012 caused the deaths of around 7 million people worldwide, an estimate roughly matched by the International Energy Agency.

Pollutants: An air pollutant is a substance in the air that can have adverse effects on humans and the ecosystem. The substance can be solid particles, liquid droplets, or gases. A pollutant can be of natural origin or man-made. Pollutants are classified as primary or secondary. Primary pollutants are usually produced from a process, such as ash from a volcanic eruption. Other examples include carbon monoxide gas from motor vehicle exhaust, or the sulfur dioxide released from factories. Secondary pollutants are not emitted directly. Rather, they form in the air when primary pollutants react or interact. Ground level ozone is a prominent example of a secondary pollutant. Some pollutants may be both primary and secondary: they are both emitted directly and formed from other primary pollutants.

Major primary pollutants produced by human activity include

- Sulfur oxides (SO_x) - particularly sulfur dioxide, a chemical compound with the formula SO_2. SO_2 is produced by volcanoes and in various industrial processes. Coal and petroleum often contain sulfur compounds, and their combustion generates sulfur dioxide. Further oxidation of SO_2, usually in the presence of a catalyst such as NO_2, forms H_2SO_4, and thus acid rain. This is one of the causes for concern over the environmental impact of the use of these fuels as power sources.
- Nitrogen oxides (NO_x) - Nitrogen oxides, particularly nitrogen dioxide, are expelled from high temperature combustion, and are also produced during thunderstorms by electric discharge. They can be seen as a brown haze dome above or aplume downwind of cities. Nitrogen dioxide is a chemical compound with the formula NO_2. It is one of several nitrogen oxides. One of the most prominent air pollutants, this reddish-brown toxic gas has a characteristic sharp, biting odor.
- Carbon monoxide (CO) - CO is a colorless, odorless, toxic yet non-irritating gas. It is a product by combustion of fuel such as natural gas, coal or wood. Vehicular exhaust is a major source of carbon monoxide.
- Volatile organic compounds (VOC) - VOCs are a well-known outdoor air pollutant. They are categorized as either methane (CH_4) or non-methane (NMVOCs). Methane is an extremely efficient greenhouse gas which contributes to enhanced global warming. Other hydrocarbon VOCs are also significant greenhouse gases because of their role in creating ozone and prolonging the life of methane in the atmosphere. This effect varies depending on local air quality. The aromatic NMVOCs benzene, toluene and xylene are suspected carcinogens and may lead to leukemia with prolonged exposure. 1,3-butadiene is another dangerous compound often associated with industrial use.
- Particulates, *alternatively referred to as particulate matter (PM),* atmospheric particulate matter, or fine particles, are tiny particles of solid or liquid suspended in a gas. In contrast, aerosol refers to combined particles and gas. Some particulates occur naturally, originating from volcanoes, dust storms, forest and grassland fires, living vegetation, and sea spray. Human activities, such as the burning of fossil fuels in vehicles, power plants and various industrial processes also generate significant amounts of aerosols. Averaged worldwide, anthropogenic aerosols—those made by human activities—currently account for approximately 10 percent of our atmosphere. Increased levels of fine particles in the air are linked to health hazards such as heart disease, altered lung function and lung cancer.
- Persistent free radicals connected to airborne fine particles are linked to cardiopulmonary disease. Toxic metals, such as lead and mercury, especially their compounds.

- Chlorofluorocarbons (CFCs) - harmful to the ozone layer; emitted from products are currently banned from use. These are gases which are released from air conditioners, refrigerators, aerosol sprays, etc. CFC's on being released into the air rises to stratosphere. Here they come in contact with other gases and damage the ozone layer. This allows harmful ultraviolet rays to reach the earth's surface. This can lead to skin cancer, disease to eye and can even cause damage to plants.
- Ammonia (NH_3) - emitted from agricultural processes. Ammonia is a compound with the formula NH_3. It is normally encountered as a gas with a characteristic pungent odor. Ammonia contributes significantly to the nutritional needs of terrestrial organisms by serving as a precursor to foodstuffs and fertilizers. Ammonia, either directly or indirectly, is also a building block for the synthesis of many pharmaceuticals. Although in wide use, ammonia is both caustic and hazardous. In the atmosphere, ammonia reacts with oxides of nitrogen and sulfur to form secondary particles.
- Odors' — such as from garbage, sewage, and industrial processes
- Radioactive pollutants - produced by nuclear explosions, nuclear events, war explosives, and natural processes such as the radioactive decay of radon.

Sources: There are various locations, activities or factors which are responsible for releasing pollutants into the atmosphere. These sources can be classified into two major categories.

Anthropogenic (man-made) sources

- **Stationary sources** include smoke stacks of power plants, manufacturing facilities (factories) and waste incinerators, as well as furnaces and other types of fuel-burning heating devices. In developing and poor countries, traditional biomass burning is the major source of air pollutants; traditional biomass includes wood, crop waste and dung.
- **Mobile sources** include motor vehicles, marine vessels, and aircraft.
- Controlled burn practices in agriculture and forest management. Controlled or prescribed burning is a technique sometimes used in forest management, farming, prairie restoration or greenhouse gas abatement. Fire is a natural part of both forest and grassland ecology and controlled fire can be a tool for foresters. Controlled burning stimulates the germination of some desirable forest trees, thus renewing the forest.
- **Fumes** from paint, hair spray, varnish, aerosol sprays and other solvents
- **Waste deposition** in landfills, which generate methane. Methane is highly flammable and may form explosive mixtures with air. Methane is also an asphyxiant and may displace oxygen in an enclosed space. Asphyxia or suffocation may result if the oxygen concentration is reduced to below 19.5% by displacement.
- **Military resources,** such as nuclear weapons, toxic gases, germ warfare and rocketry

Natural sources

- Dust from natural sources, usually large areas of land with little or no vegetation
- Methane, emitted by the digestion of food by animals, for example cattle
- Radon **gas** from radioactive decay within the Earth's crust. Radon is a colorless, odorless, naturally occurring, radioactivenoble gas that is formed from the decay of radium. It is considered to be a health hazard. Radon gas from natural sources can accumulate in buildings, especially in confined areas such as the basement and it is the second most frequent cause of lung cancer, after cigarette smoking.
- Smoke and carbon monoxide from wildfires
- **Vegetation**, in some regions, emits environmentally significant amounts of Volatile organic compounds (VOCs) on warmer days. These VOCs react with primary anthropogenic pollutants—specifically, NO_x, SO_2, and anthropogenic organic carbon

compounds — to produce a seasonal haze of secondary pollutants. Black gum, poplar, oak and willow are some examples of vegetation that can produce abundant VOCs. The VOC production from these species result in ozone levels up to eight times higher than the low-impact tree species.

- Volcanic **activity**, which produces sulfur, chlorine, and ash particulates

Emission factors: Air pollutant emission factors are reported representative values that attempt to relate the quantity of a pollutant released to the ambient air with an activity associated with the release of that pollutant. These factors are usually expressed as the weight of pollutant divided by a unit weight, volume, distance, or duration of the activity emitting the pollutant (e.g., kilograms of particulate emitted per tonne of coal burned). Such factors facilitate estimation of emissions from various sources of air pollution. In most cases, these factors are simply averages of all available data of acceptable quality, and are generally assumed to be representative of long-term averages.There are 12 compounds in the list of persistent organic pollutants. Dioxins and furans are two of them and intentionally created by combustion of organics, like open burning of plastics. These compounds are also endocrine disruptors and can mutate the human genes.The United States Environmental Protection Agency has published a compilation of air pollutant emission factors for a multitude of industrial sources. The United Kingdom, Australia, Canada and many other countries have published similar compilations, as well as the European Environment Agency[9,10].

4. Conclusion

Currently the air contains 380 ppm of carbon dioxide which is the main gas that causes global warming, compared with the 275 ppm that existed in the atmosphere before the Industrial Revolution, and here we note that the amount of carbon dioxide concentration in the atmosphere has become the highest at 30 % lower than it was before the Industrial Revolution concentration.

The amount of methane concentration increased to twice the amount of focus before the Industrial Revolution, as well as carbon dioxide increase by 4% per annum from the current ratios, either nitrous oxide has become the highest at about 18% of the amount of focus before the Industrial Revolution.

We also note the following

* The water level rose in the seas of 0.3 to 0.7 feet over the past century.
* The temperature rose between 0.4 to 0.8 ° Q during the last century, according to a report of the International Commission on Climate Change of the United Nations.
* Rapid output of global warming as rising temperatures will eliminate three-quarters of the accumulated snow on the peaks of the Alps by 2050, causing devastating floods in Europe and considered this a warning must be alert to him.
* Also, from the results of global warming, rising sea 48 cm level which could threaten buildings, roads, power lines and other infrastructure in the same climate sensitive areas, scientists say sea level rise rates contained in the report could engulf Manhattan in New York water until Wall Street.
* In the Himalayas and found 20 glacial lake in Nepal and 24 glacial lakes in Bhutan has been inundated dissolved over the icy Himalayan summit, threatening crops and property drowning and floods to the lakes for ten years to come.
*Scientists likely reason for this is these lakes filled with ice water dissolved by the Global Environment Program found that Nepal temperature one degree centigrade rate has increased and the ice cover over Bhutan falls 30 to 40 meters per year and the floods of

water ice made Bhutan and Nepal authorities assess the levees to ward off dangers these floods.

* The research published in the journal Nature, Nature on 16 second Novmbertharin in 2005 has shown that if the cause of global warming on the melting of rivers, mountains and ice blocs annual snow, it is likely to face the communities that depend on these sources of devastating natural disasters, and also as a result of climate warming the world over the past century half a degree Celsius taking the ice at the poles and the tops of the mountains above the Australian to melt significantly noted climate scientists that the winters have increased during the last three decades warmer than it was before and failed epochs Valrabie comes early for his appointments.

*This Arjehouna of global warming world, John Morgan Ali and attached this phenomenon puzzling saying that Australia is located in the southern hemisphere, and this rate of melting ice legacy icy environment might lose during this century has been observed that the trees in the area semi-polarity there are height has increased than ever before have increased a height of 40 meters than usual for a quarter of a century.

*This cautionary early for the rest of the world index because the increase of global warming environmentally damaging in another by zones may occur and this environmental splurge on the planet that could get lost ice disappears completely over it during this century and the ice has effects on the temperature and climate and monsoon.

*Also, the results of global warming, the extinction of many species of birds and plants Experts have confirmed that about 70 species of frogs have become extinct because of climate change, and that the dangers surrounded by between 100 to 200 species of animals that live in cold regions.

*Also contributes to the greenhouse to increase the spread of endemic diseases and epidemics such as malaria, dengue fever and typhoid, cholera rate due to the migration of insects and animals of delivery of its places in the south to the north, as well as due to the high heat and humidity and a lack of clean drinking water.

*The researchers have found that the high temperature leads to the destruction or decrease the productivity of some natural habitats vital, especially the coral reefs and tropical forests, one of the most important habitats on the planet and the most tender of humanity, followed by increasing the extinction of organisms rates are a direct result of the destruction of such habitats and not a lot of its objects the ability to adjust to the new changes.

*On the other hand this serious environmental imbalance leads to increase the proportion of arid land agriculture and low productivity as a direct result of increased drought ratio was affected a large number of agricultural crops adversely change the temperature and climate and changing patterns of rain and snow, ocean currents and the high salinity and acidity of sea water, and the consequent increase droughts, forest fires and storms unit and other climatic disturbances.

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8. "CLIMATE CHANGE 2014: Synthesis Report. Summary for Policymakers" (PDF). IPCC. Retrieved 1 November 2015. The following terms have been used to indicate the assessed likelihood of an outcome or a result: virtually certain 99–100% probability, very likely 90–100%, likely 66–100%, about as likely as not 33–66%, unlikely 0–33%, very unlikely 0–10%, exceptionally unlikely 0–1%. Additional terms (extremely likely: 95–100%, more likely than not >50–100%, more unlikely than likely 0–<50% and extremely unlikely 0–5%) may also be used when appropriate.
9. "CLIMATE CHANGE 2014: Synthesis Report. Summary for Policymakers" (PDF). IPCC. Retrieved 7 March 2015. The evidence for human influence on the climate system has grown since the Fourth Assessment Report (AR4). It is extremely likely that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in greenhouse gas concentrations and other anthropogenic forcings together

10. America's Climate Choices: Panel on Advancing the Science of Climate Change; National Research Council (2010). Advancing the Science of Climate Change. Washington, D.C.: The National Academies Press. ISBN 0-309-14588-0. (p1) ... there is a strong, credible body of evidence, based on multiple lines of research, documenting that climate is changing and that these changes are in large part caused by human activities. While much remains to be learned, the core phenomenon, scientific questions, and hypotheses have been examined thoroughly and have stood firm in the face of serious scientific debate and careful evaluation of alternative explanations. * * * (p21-22) Some scientific conclusions or theories have been so thoroughly examined and tested, and supported by so many independent observations and results, that their likelihood of subsequently being found to be wrong is vanishingly small. Such conclusions and theories are then regarded as settled facts. This is the case for the conclusions that the Earth system is warming and that much of this warming is very likely due to human activities.
11. "EPA". EPA. EPA.