"Carbon Sense"

Carbon is the building block for all life on earth.
Carbon dioxide in the atmosphere sustains all life.
Carbon provides all of the food and most of the energy for the human race.
To be anti-carbon is to be anti-life and anti-human.

Viv Forbes, Chairman, The Carbon Sense Coalition.

"Carbon Sense"

Part 1

The key role of Carbon in the cycle of life, as a source of food and energy and in the atmosphere.

by Viv Forbes

Chairman The Carbon Sense Coalition
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"*Men go mad in herds,*
but they recover their senses slowly
and one by one".
Unknown author.

Part 1 - Executive Summary

This report is not a learned and annotated scientific paper. It is a personal presentation of the conclusions reached after a life time of personal study and experience in the fields of geology, chemistry, physics, politics, soils, pastures, forecasting, computer modelling, weather, economics and the production and uses of carbon foods and energy minerals. The support, suggestions and contributions given by the members of the Carbon Sense Coalition and others is acknowledged.

Our considered conclusions are:

- Carbon is the building block for all life on earth.
- Carbon dioxide is a colourless, odourless, non-toxic form of carbon which has always been present in the atmosphere. All life on earth evolved in the presence of carbon dioxide – it is not a threat to life, nor is it a pollutant.
- Carbon dioxide in the atmosphere is the essential recycler of all organic matter on earth. Without carbon dioxide in the atmosphere, all plant and animal life in the world would die. Water vapour, oxygen and carbon dioxide are the "Gases of Life".
- The carbon dioxide content in the atmosphere is always varying and today's level is not unusual or extreme.
- Warmer temperatures and more carbon dioxide in the atmosphere would encourage the growth of plants and increase food supplies for all animals, including humans.
- In the past, warm periods (warmer than the present) have brought human prosperity, and are referred to as "Golden Ages". The cold periods have brought hardship, famine, migrations and wars and are referred to as "Dark Ages".
- The atmospheric gases and clouds play a beneficial role in shielding the earth from extremes of temperature.
- Earth is not a Greenhouse – there is no glass roof and convection is a very efficient method of transferring excess heat from any part of the atmosphere.
- The so-called "Greenhouse" gases do have some effect in retaining the sun's heat in the atmosphere, and this is beneficial to surface life. However, water vapour, which is some 100 times more abundant than carbon dioxide, and clouds, which also directly intercept radiation from the sun or from the surface, are far more significant than carbon dioxide in affecting surface temperature.
- The greenhouse effect of carbon dioxide is not proportional to the CO2 content in the atmosphere – it is logarithmic, and the effect declines sharply as CO2 content rises. The first 200 ppm of CO2 has a greater greenhouse effect on than the next 400 ppm. Thus, even a doubling of CO2 content would have far less effect on surface temperature than the small effect that ***may*** have already occurred.
- Earth's climate, including temperature, is always changing and today's temperature is no exception. Temperature has generally increased since the depth of the Little Ice Age (1400 - 1800 AD), well before coal fired power stations and Toyota land cruisers were invented.

- Temperature has generally continued to rise since 1900 (about 0.6 deg in total) but in waves that do not parallel the steady increase in carbon dioxide. Longer term plots of temperature and carbon dioxide prove that carbon dioxide is not the cause of rising temperature, but suggest that increases in carbon dioxide may be the result of increases in temperature.

- In recent years, surface temperature peaked in the 1990's. Since 1980, southern hemisphere temperature has been flat, and there is slight increase in Northern hemisphere temperature. Oceans may be warming more than the atmosphere. In the US, the hottest year since 1900 was 1936. There is no evidence that temperature is increasing in parallel with the gradual increase in carbon dioxide in the atmosphere.

- We make no forecast here regarding future temperature of the earth – no one can do that with certainty. What we do say, emphatically, is that there is no evidence that carbon dioxide in the atmosphere is a significant cause of rising temperatures.

- The sun is a far more important factor than carbon dioxide in determining surface temperature on earth, and the close correlation of past temperature with solar output suggests the sun is the primary governor of temperature.

- Man's activities are estimated to account for a mere 5% of all carbon dioxide emissions into the atmosphere. The other 95% comes from animals breathing, oceans, volcanoes, rotting organic matter, wild life, bush fires, insects and termites.

- Volcanoes emit carbon dioxide. Earth's history is littered by periods of intense volcanic activity. An estimated 80% of this occurs beneath the oceans and also causes heating there. Heated oceans cause increased evaporation, increased emissions of carbon dioxide and more precipitation (rain, hail and snow).

- Man is also blamed for another greenhouse gas – methane. However, oceanic sediments on the continental slopes contain prodigious quantities of methane which are liberated at irregular intervals by undersea earthquakes, volcanoes or slumping.

- Earthquakes also cause the emission of large and unmeasured quantities of the main greenhouse gases – water vapour, carbon dioxide and methane. Most earthquakes originate along the mid ocean ridges, where the gases come from hot lava beneath; or on the continental shelf, where slumping and earthquakes cause tsunamis and the release of large quantities of gases entrapped in the sediments.

- Mud volcanoes and swamps release large quantities of greenhouse gases. Around the Caspian and Black Seas, and under the Black Sea, there are hundreds of vents, many of which have been emitting water and natural gas for centuries.

- Oceans are a huge reservoir of heat and carbon dioxide. Oceans absorb heat from the sun and the atmosphere, and heat and carbon dioxide from undersea volcanoes. This heat drives ocean currents, and affects surface temperature and precipitation. The heat is dissipated by radiation, ocean currents, evaporation and winds. These effects on temperature overwhelm any effects of man's emissions of carbon dioxide.

- Warm oceans emit carbon dioxide, and cold oceans absorb it. This proven relationship tends to support the observation that higher temperatures are the cause, not the result, of increases in carbon dioxide in the atmosphere.

- The thickness of polar ice sheets varies more with the amount of precipitation than with atmospheric temperature. Once more snow falls in winter than evaporates in summer, ice sheets will thicken and glaciers advance. Paradoxically, warm seas are likely to result in more precipitation and thickening ice sheets. Increases in undersea vulcanism, ocean warming, precipitation and the thickness of polar ice caps are noted in several places now.

- Human beings (and polar bears) have survived periods of earth's history that were hotter and colder than today. Neither species can control the climate - both must adapt or die.

- There is no evidence that increasing carbon dioxide in the atmosphere is responsible for increased floods, droughts, hurricanes, cyclones or the spread of malaria. However, there is evidence that unusual weather events may be used by politicians to win votes and by academics to win research funds.

- All plants absorb carbon dioxide as they grow. The key plant landscapes are grasslands, bush and forests, and in water - plankton and algae.

- Well managed grasslands have an enormous capacity to absorb carbon dioxide, both for the growing plants on the surface and the increased worm and microbe life in a healthy soil.

- The plankton fields of the sea could be managed and fertilised to remove carbon dioxide and produce more food for marine life.

- Dissolved carbon dioxide in the oceans is the basic building block for coral reefs and islands, sea shells and oysters and is "fixed" in large deposits of limestone and dolomite.

- Bushland absorbs carbon dioxide as it grows, but this stops as the bush thickens and starts to choke itself.

- Mature forests emit about as much carbon dioxide as they absorb. Forests are carbon sinks only if mature trees are logged. Thus the long campaign against the forestry industry is as misguided as that against grazing animals.

- National parks absorb carbon dioxide from the atmosphere while they grow and then give most of it back in one smoky day as they burn.

- Cave men burned natural carbon fuels (wood, coal, bitumen and dung) in open combustion fires to produce heat for cooking and warmth.

- Industrial man extracts energy from natural carbon fuels (coal & oil) by controlled combustion to produce steam in boilers.

- Automotive man extracts energy from natural liquid and gaseous carbon fuels (petroleum products) by burning them in a confined (internal) space. We call it an "internal combustion engine".

- Animal life extracts energy from natural carbon fuels (organic matter) by a process of slow internal combustion in their gut and living cells. We call it "digestion and respiration".

- Combustion of <u>every</u> carbon fuel, even "clean" gas, "green" ethanol or "organic" food, produces emissions of carbon dioxide and water when they are burned. Nothing can change this fact.

- Combustion of carbon fuels is not an unnatural process and has been occurring for as long as plants, hydrocarbons and fire have existed. Nor are the emission products of internal combustion in any way "unnatural". Organic matter, hydrocarbons, fire and combustion all preceded man – he just harnessed them to work for him.

- Taxing and capping carbon emissions, carbon geo-sequestration and subsidising farmers to allow their land to be taken over by a monoculture of woody-weed eucalypts are recipes for future shortages and higher prices for food and power.

- Subsidising the production of ethanol from food sources such as grain or sugar cane has no net benefits for the environment or the economy but will cause shortages and higher prices for all food for humans and domestic animals. Ethanol should compete on an equal basis with all other liquid fuels.

- The computer models relied on by the UN's IPCC have no record of credibility in forecasting future surface temperature. This is not surprising because of the complexity of the factors affecting climate: vast mysterious oceans, the restless atmosphere, the variable sun, and the hidden and erratic volcanos. Real evidence from studies of past climate trends, cycles and correlations are far more instructive, and have greater predictive value.

- The proposals to cut carbon emissions by 20%, or 30%, or 50%, or 80% by 2020 or 2050 are totally arbitrary and totally unrealistic, but attempts to achieve any of them (especially in the face of rising populations) will disrupt economies and increase poverty.

- Coal powers most of our cities and oil powers most of our transport vehicles on road, sea and air. Without these two power sources, today's urban populations are not viable. That is a reality. Anyone who talks about closing all coal mines or abolishing the internal combustion engine must produce realistic alternative energy sources, alternative life styles or mass migration options.

- Large scale development of any alternatives to coal will soak up new capital while abandonment of coal fired power stations will destroy old capital. Destruction of capital always results in more poverty for the society silly enough to do it.

- Solar power works only while the sun shines and wind power works only while the wind blows. And to collect significant energy from these dilute sources will sterilise and blight whole landscapes with flat panels and whirling blades (all made from metals probably mined and processed using fossil fuels.)

- With the possible exception of tidal power in the North West, hydro power has little undeveloped potential in Australia, and any development proposals would be opposed by the usual mob for the usual reasons.

- Geothermal and hydrogen are unproven energy sources and cannot replace base load coal power in any foreseeable time frame. Elemental hydrogen occurs only rarely in nature and has to be produced from water or coal, using nuclear or coal power.

- The only feasible alternative to carbon fuels (coal and oil) as a base load energy source for electricity generation is nuclear power. Thus the stark alternatives for those who suggest severe cuts to man's emissions of carbon dioxide are nuclear power or severe economic contraction.

- We are not promoting nuclear power here, but those who attack carbon fuels are doing just that.

- There are now a large number of businesses, research grants and reputations dependent on successful promotion of the Global Warming Industry. Governments should question the quality of their advice and must act in the interests of ordinary taxpayers and consumers.

- There is no consensus of scientists, laymen, politicians or governments on the need for drastic action to cut man's carbon dioxide emissions. Any unilateral action by a very insignificant world player like Australia is ludicrous.

- None of this is to justify pollution. There is no defence for people who pollute air or water with dirt, soot, ash, or harmful gases or chemicals. We support clean combustion processes.

- Neither carbon dioxide nor water vapour are air pollutants.

"To capture the public imagination,
we have to offer up some scary scenarios,
make simplified dramatic statements
and little mention
of any doubts one might have.
Each of us has to decide the right balance
between being effective,
and being honest."

Leading greenhouse advocate, *Dr Stephen Schneider(in interview for "Discover" magazine, Oct 1989)*

"We must make this an insecure and inhospitable place for capitalists and their projects . . . We must reclaim the roads and plowed land, halt dam construction, tear down existing dams, free shackled rivers and return to wilderness tens of millions of acres of presently settled land."

David Foreman, Earth First!

Conclusions

- Carbon and carbon dioxide are essential to all life.
- Climate is always changing.
- There is no Global Warming Crisis.
- Carbon dioxide is not the chief cause of increasing surface temperature. Man's contribution to global warming is insignificant.
- The role of carbon dioxide in the atmosphere is wholly beneficial.
- The whole case against carbon dioxide rests on computerised forecasts of future temperature. The earth's climate is far more complex than all of the UN's computer models whose forecasts have never proved accurate in the past.
- The sun, volcanic activity, oceans, precipitation levels, snow cover and clouds have more influence on surface temperature than man-made variations in carbon dioxide.
- The only feasible alternative to coal to supply base load power to today's urban populations is nuclear power.
- Without the nuclear option, carbon caps and taxes can only cause destruction of industry, shortages of power and food and general poverty, for no clear benefit.
- If Australia or Queensland attempts to "go it alone" in the "kill carbon" stakes, it will merely transfer industry and jobs to more enlightened countries, and the new dark age will visit our families first.

Viv Forbes
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This document is the Executive Summary of a longer document. The remainder, "Carbon Sense Part 2", can be found on our web site www.carbon-sense.com

Should any reader seek supporting evidence for any of the above statements, they should contact the author at The Carbon Sense Coalition.

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Acknowledgement: Front cover from "The Family of Man", Museum of Modern Art, New York, 1955.

"Kyoto is the first component of an authentic global governance."

Jacques Chirac.