

**Summary of the current situation regarding the N2O Avoidance Methodology:
Addressing the Agricultural Industries N2O Emissions, at 310:1 equivalent of CO2 levels.**

Currently all **Carbon Trading Units** are measure on **Carbon Dioxide Levels CO2**. The most destructive form of emission to our **Ozone is Nitrous Oxide N2O**. **N2O is 310/1 more toxic than CO2** and it stays in the atmosphere for **100 YEARS, THAT'S RIGHT 100 YEARS**. **N2O depletes the Ozone layer** at a rapid rate. **Most large industry emissions are CO2**, not **N2O**. The **Ozone layer** is what protects the Earth surface. Large concentrations of **N2O** make the **Ozone** thin and unable to protect against **Global Warming**; ice melting, higher UV Radiation eg: more skin cancers etc.

The Australian Government talks about **Climate Change and Emissions Reductions** but they only talk in **CO2** which can be removed from the atmosphere by plants. **N2O** cannot, **IT MUST BE AVOIDED!**

The biggest contributor to Nitrous Oxide Emissions is Agriculture. The UNEP (United Nations Environment Programme) puts this figure at **66.4%**. The major cause of **N2O** emissions within agriculture is the application of synthetic nitrogen. Again the UNEP (2013) states that the emissions increase proportionally with the application of nitrogen see below:

The **United Nations Environment Programme (UNEP)**, <http://www.unep.org/pdf/UNEPN2Oreport.pdf>; states that **Nitrous Oxide (N2o)** is as potent as CFCs and could be measured at not 310/1 but as high as 1300/1 in line with CFCs and HFCs. (McSwiney and Robertson, 2005; Stehfest and Bowman, 2006; Cardenas et al., 2010; Hoben et al., 2011), argue that emissions increase more than proportionally with nitrogen applied. (UNEP 2013). If the **UNEP** has these figures, and presumably the data to back up the figures, **N2O Avoidance Method** then becomes an important tool to combat climate change. *Agriculture is by far the largest source of anthropogenic N2O emissions. Emissions from nitrogen in fertilizers and manures, crop residues, and other agricultural sources currently amount to 4.1 Tg N2O-N/yr (range: 3.8-6.8), equivalent to about 66%4 or two-thirds of total gross anthropogenic emissions* (UNEP 2013 pp.x).

THERE IS HOWEVER AN IMMEDIATE SOLUTION - A small company in Australia has developed a **N2O Avoidance Methodology** currently reviewed by Dpt. Environment – SENIOR POLICY OFFICER, Methods Development Team, they described the Methodology as 'BRILLIANT'! The methodology, contains a **N2O-NITROUS OXIDE AVOIDANCE PROGRAM, an AGRONOMIC ADVICE SYSTEM, a CARBON AND NUTRIENT MEASURING SYSTEM,**

a **SOIL SAMPLING SYSTEM** and an **OFFSET CERTIFICATE SYSTEM** which is unique and superior to anything of its' type in the world. The program is based on the teachings of **Professor Dr. William Albrecht's Soil Fertility Formula** and adapted for modern day farming, empowering the landholder to **increase productivity, fertility**, all whilst **preventing GHG emissions from N2O**. This programme does not **USE ANY** Applied Nitrogen, therefore **NO N2O emissions**.

Problem is the **Australian Government does not recognise N2O** and will only pay the Farmers on **C02** not the **N2O equivalent**. This gives no incentive to the farmers to change their farming practices All the data is available from the **UNEP** or the **UNCCC** or the **IPCC (these are the bodies Aust. Govt. reference)** on the damage **N2O** does but the current government states and I quote "your methodology is brilliant but the current system does not allow for N2O emissions we don't have the research on it, we don't even know how much urea farmers are using" (ERAC Nov. 2015).

I recently meet with the Aviation Industry to discuss offsetting their fuel emissions per annum with Carbon Credits derived from the N2O Avoidance Method of Australian Farmers (currently 200 farmers or 3.5m t offsets). The Aviation industry was very keen to enter into discussions on offsetting. The Australian Government is doing very little to expedite this interdependent project, with regards to recognising **N2O** emissions. This project would have been able to make one Airline Carbon Neutral.

WORLDWIDE WE have a very serious problem **N2O – NITROUS OXIDE EMISSIONS** depleting the **OZONE LAYER**. We know a high contributor is – **THE AGRICULTURE INDUSTRY WORLD WIDE**, applying synthetic Nitrogen. We have a **SOLUTION**: N2O Avoidance Methodology.

There is a method available for farmers to immediately cease using applied nitrogen and still produce grain, milk and veg without any loss of production – farmers can change from conventional farming to the methodology with absolutely no loss in yields. This year Australian farmers were hit with a 6 week dry spell at a crucial time. Most farmers cut their crops or reported yields as low as .5 t ha. Our farmers in the driest parts of the country reported yields of 5 to 6t ha. Most of our farmers are buying up the neighbours land. The farming stories on this method are music to the ears.

Oddly enough the most common statement is "*that sounds too simple to be right*". Well it is true! I could parade in front of you a list of farmers from very marginal areas of the Australian Inland to the fertile blocks of Tasmania and they would all testify that this method works. The farmers are happy for you to visit there properties, or you could be provided with video testimonials if required.

The objective is to have this methodology accredited, so as to facilitate the trading of offsets for these farmers. The knowledge and the satisfaction of knowing that in a small way there is the reduction of the N₂O being released into the atmosphere, giving incentive to farmers to stop using applied nitrogen when it is not necessary.

The advice or assistance sought is in the accreditation process for N₂O avoidance. It just does not fit into the Co₂ category of the Australian Government, it is that simple. It is extremely frustrating to have a solution to a very serious global problem with no way to have it accredited and rolled-out in a timely fashion.

This Farming Method is applicable regardless of soil nutrient level, climate and area. The method is globally applicable.

My scientific knowledge is in Psychology. I know what action is required to provide the incentive for farmers to change their current production practices. This method has shown very positive results and stands alone on an Agronomic stage but the incentive for rapid change is in the offsets.