

# Why energy shortage is a myth

**Bryan Leyland**

In 1712, Thomas Newcomen's steam engine started a revolution.

It freed us from expensive horsepower, unreliable wind power and inadequate water power.

It gave us a reliable, low-cost supply of all the power we needed. It spawned the Industrial Revolution and the modern world. Without it, life would still be unhealthy, miserable and short.

Low-cost energy allows the average person to live better than a king in the 1700s. Virtually everything in the modern world requires a reliable supply of low-cost energy.

Human development is strongly linked to energy consumption. Societies with an ample supply of energy are prosperous and, as a result, can afford to look after their environment.

It is often claimed "economic growth is incompatible with the environment:" nothing could be further from the truth.

Poor people get their energy supplies from cow dung or chopping down forests. These resources might be renewable but they are certainly not sustainable.

We constantly hear that world energy resources are declining rapidly. In fact, the world has more energy resources available now than it has ever had in the past.

## No peak oil

Oil reserves now stand at more than 50 years and are 50% higher than they were 20 years ago. But what about "peak oil?" We are told that newly discovered oilfields are not matching consumption and therefore we are running out of oil.

This proposition ignores the increase in reserves as existing fields expand, from advanced technologies that allow more oil to be extracted from existing fields and oil from tar sands. When these are taken into account, peak oil disappears well into the future.

We have enough conventional gas for about 60 years. Recently discovered shale gas has increased this by another 40%. Many environmentalists want to ban drilling for shale gas because, they claim, there are environmental problems. But shale gas has been exploited for more than 20 years and as the technology

advances, the minor environmental problems are being solved.

Coal reserves will keep us going for 120 years or more. Modern coal-fired power stations are clean and efficient.

With modern technology, coal can be burned directly in gas turbines and diesel engines and it can be turned into liquid fuel. New Zealand has enough coal for hundreds of years.

And then there is nuclear power. Uranium is as abundant as tin and we have been mining tin for 5000 years. Thorium is a better fuel for nuclear reactors and is three times as abundant as uranium. One tonne of thorium produces a lot more electricity and a lot less waste than one tonne of uranium.

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People seem to forget that one dam failure in China in the 1970s killed 170,000 people and even more people have died as a result of coal mining. Even gas has killed more people than nuclear power.

## Radiation levels unrealistic

Recent research into the dangers of radiation show the present regulations on radiation – which were set many years ago – are unrealistic. In France and Iran, people are living healthy lives with natural radiation levels 200 times higher than the limit for nuclear power stations.

Furthermore, there is convincing evidence that people who are exposed to moderate levels of radia-

tion have a greater resistance to cancer than other people.

The highest levels of radiation experienced by the workers at Fukushima station are well below levels that are dangerous so we can be sure that no one will die.

If this new evidence is accepted and incorporated in the regulatory standards, the bogey of nuclear waste is massively reduced.

If we have to keep nuclear waste secure until its radiation level is below the levels now known to be harmful, rather than the much lower levels presently prescribed, the time for which it must be kept safe is massively reduced.

Given the above, do wind and solar power have any future? These industries exist only because they are heavily subsidised – to the tune of more than one trillion dollars.

If they had to compete with coal, gas and nuclear, they would not exist.

The world has enormous low-cost resources, so wind and solar power have no significant future.

Even in New Zealand, where the wind is unusually strong, no wind farm would pay its way if it had to pay for the backup power supply that is needed when the wind is not blowing.

The world has all the resources it needs for an adequate and low-cost supply of energy into the foreseeable future.

The key question is whether various pressure groups will succeed in stopping us using it.

The main pressure group is people who choose to believe man-made carbon dioxide causes dangerous global warming. In fact, the world has not warmed in the past 10-15 years in spite of a steady increase in carbon dioxide.

The world is now heading for a period with low or zero sunspot numbers. The last time this happened, we had the Little Ice Age. The big risk is cooling.

We can choose to use the world's ample energy resources and prosper. Or we can shun them and doom the developing world to continued poverty, overpopulation, disease and famine. The choice is ours.

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