

Too Many Misconceptions

This is another version of the David Suzuki article, which is entitled, “The answer is blowin’ in the wind”. It is an inspiring, but misdirected “call to arms” to defeat global warming, the use of non-renewable energy sources, including nuclear fission and long-term radioactive-waste problems. Against these very formidable “foes” he would have us arm ourselves largely with flimsy wind power. This position is very questionable.

Comments here should be taken in conjunction with those on the first Suzuki article.

He says, “...the dangers of global warming are so great that we cannot continue along the same path.” The threat of global warming is a reasonable premise for many, but there is no supportable logic that shows that wind power, or any new renewable energy source, has the ability to make the needed impact throughout the period leading up to 2030. Arithmetic can be produced to show wind energy growing to 20 per cent of the total electricity demand, but this does not mean that there will be anything close to 20 per cent reductions in CO2. Massive implementations in Germany have made no such impact. It is interesting that conservation, a less expensive and more effective measure, is ignored, although he champions it elsewhere. David Suzuki needs to provide a comprehensive treatment of the problems and solutions, including the total electricity system impact, not a piecemeal one represented by this article.

As with many others, Suzuki does not take into account the time frame factor as described on my “About” and front page and tends to view all decisions taken today to be for all time.

He says, “Today, Denmark obtains 20 per cent of its energy from wind power and is aiming at 50 per cent by 2020.” If he is implying that 20 per cent is used domestically within Denmark, he is incorrect. Denmark uses about 6 per cent of the wind-produced electricity domestically, which is the upper limit that any electricity system can withstand for the short to medium term up to 30 years from now. Denmark is aiming at obtaining 30 per cent of its energy from renewable sources by 2025 for all sectors (not 50 per cent, not just wind power, not just electricity and not by 2020). One way to get more renewable energy into its electricity system would be for Denmark to import large amounts from Norway and Sweden, who together have 75 per cent hydro generation.

He says, “Germany obtains 14 per cent of its energy from wind.” This is not true. Germany obtains 14 per cent of its electricity energy from all renewables, with a breakdown of 5 per cent from wind and 8 per cent from hydro and other renewables (largely biomass). A less than careful reading of sources can result in confusing energy from all renewable sources as energy from wind alone.

He says, “Even the U.S. Energy Department has concluded that wind power could become the source of one fifth of that nation’s power by 2030.” Yes, they have projected this, but it remains to be seen, as the limit to wind energy integration into electricity systems is about 5 per cent. Further, this projection would require heavier concentrations in the areas where wind plants are installed, which is another limiting factor.

The DOE assumes that coal and gas generation will be displaced by wind power, which is a simplistic and superficial treatment of wind power’s impact. Any coal displacement will be due to the presence of gas. Gas generation will be further increased by the equivalent amount of increases in wind name plate capacity, as it will be required for wind shadowing/balancing backup. This is reported as the experience in Germany, where the increased import of gas has worked against its goal of energy security and independence. Such government projections, and the attendant need for more gas, are the reasons for T. Boone Pickens support of wind power. He has considerable gas assets.

He says, “The problem with making major inroads on the climate challenge is not lack of solutions; it is lack of will.” This is his concluding remark. Does it reveal that his overriding concern is climate change? If so, how does it change the way he should view short to medium term solutions that will have the necessary impact? In any event, the

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problem is not lack of will (unless he is thinking of conservation and again mixing his arguments), but lack of effective assessment of the threats we face and comprehensive treatment of solutions in the short to medium term.

All the factual errors, apparent lack of understanding how electricity systems work, and inclination to rhetoric, explains how David Suzuki could fall into the position that he has taken on wind power.