

# The Climate Solutions Dividend

**No problem of human destiny is beyond human beings. Man's reason and spirit have often solved the seemingly unsolvable — and we believe they can do it again.**

— President John F. Kennedy, American University, June 10, 1963.

If we succeed in this great undertaking, the next generation will thank us not only for preventing the looming catastrophe but also for the many benefits that will flow from our success.

The ecological benefits are clear, but no one has calculated the full economic benefits. These are the climate solutions dividends, the enticing rewards for success.

1. We get to avoid the desperate scenarios laid out in *Six Degrees* (see p. 24) and keep human civilization intact, including many species that would otherwise face extinction. What price should we put on the ability of our children to continue the journey of evolution? The avoided costs are known: 5–20% of the US's GDP of \$14 trillion is \$700 billion to \$2.8 trillion a year. In Canada, it is \$63 to \$254 billion a year. The gains are priceless.
2. We enjoy a managed transition through what would otherwise be the economic trauma of peak oil, avoiding the relentless waves of bankruptcies, evictions, unemployment, poverty and hunger that will be caused by peak oil's sudden arrival, for which — at

present — our societies are completely unprepared.

3. We enjoy permanent energy security and the end of dependence on oil from the Middle East and other countries. This means we can bring the troops home, stop irritating the Islamic terrorists, stop being obsessed with security and stop exporting \$300 million a day to the oil-rich states of the Middle East. These gains have been costed out by the National Defense Council Foundation. For the US, they come to \$825 billion a year. (See p. 38.)
4. We protect the world's forests, which would otherwise face being logged or burned. Under the business-as-usual scenario, the Amazon rainforest starts dying by 2050 and turns into savannah by 2100, because of a combination of drought and fire. Because tackling climate change requires that we preserve the forests' carbon, our children will continue to be enchanted by their magnificence. We will also benefit from the forests' ecosystem services, as a continued contribution to our economy. Globally, their 1200 Gt of stored carbon, priced at \$13.60 a tonne, has a \$16 trillion value. If we assume a 200-year forest carbon lifecycle, that's \$80 billion a year. For the US, with 5% of the world's forest, that's a \$4 billion a year contribution. For Canada (10% of the world's forests) it's \$8 billion.
5. We enjoy a more secure global food supply by embracing organic farming, which stores more carbon in the soil, reduces farming emissions by up to 30% and increases yields in developing

The Yearly Climate Solutions Dividend	Low range	High range
End of Persian Gulf oil dependence	\$825	\$825
End smog and air pollution	\$59	\$690
Peace dividend	\$680	\$680
Improved efficiency	\$338	\$338
Total, per year	\$1.9 trillion	\$2.5 trillion

countries. (See #42.) We also remove the threat to crops from smog, air-pollution and the increasing heat waves, which would reduce the yields.

6. We eliminate smog and pollution, which cause asthma, lung disease, cancer, disability and premature death. For Los Angeles alone, this has been assessed at a \$10 billion annual cost. Air pollution and smog also cause crop losses and damage buildings and forests. For Ontario, Canada, the costs have been estimated at \$8 billion a year, rising to \$250 billion by 2030 as rising temperatures cause more smog.<sup>1</sup> For the US, the full economic savings are up to \$690 billion a year.<sup>2</sup> In California, smog and air pollution cause 9,300 deaths, 16,000 hospital visits, 600,000 asthma attacks and five million lost work days every year.
7. We enjoy cheaper driving, more cycling routes, more public transport, more high-speed rail and more friendly, walkable communities, which build neighborhood strength. These benefits have not been costed out.

8. Thanks to our investments in efficiency, we enjoy lower heating and power bills. The American Council for an Energy Efficient Economy has calculated that a 15% increase in efficiency will produce annual savings worth \$169 billion a year. By increasing efficiency by 30%, this could rise to \$338 billion.
9. We get to end most warfare. This may sound unbelievable, but most modern conflicts are fought over scarce energy supplies. When nations become self-sufficient in renewable energy, we can eliminate 80% of our military expenditures. The US military budget is about \$1 trillion a year,<sup>3</sup> of which \$138 billion has been included in #3 above. This leaves \$850 billion a year, which, trimmed by 80%, produces a peace dividend of \$680 billion a year.
10. Finally, we enjoy our first proper experience of working together as a world, and we restore hope to our children. What more can we ask?

*Members of the T'Sou-ke First Nation celebrate the installation of its 75 kW solar PV system, the largest in British Columbia. [tsoukenation.com](http://tsoukenation.com)*



T'SOU-KE FIRST NATION