Strong evidence for reduced emissions: a big opportunity

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International Energy Agency (IEA) head Fatih Birol didn’t mince his words on the effectiveness of the transport electrification agenda in reducing GHG emissions at a recent Statoil conference in Norway where he presented the IEA’s 2017 World Energy Outlook:

“Going from 2 million to 300 million electric cars will affect global climate emissions by less than 1 percent. So if you think you can save the climate with electric cars, you are completely wrong. It will be a modest contribution, but not the solution.”

Meanwhile, the IEA’s 2017 Policy Pathways Brief - Improving Fuel Economy of Road Vehicles confirms that market-ready technologies for conventional gasoline and diesel vehicles can cost-effectively reduce the specific fuel consumption of new vehicles by half, cutting emission significantly and providing other significant benefits including lower costs and better air quality for consumers.

Analysis by the International Council on Clean Transportation (ICCT) confirms this IEA assessment in spades. ICCT’s 2017 White Paper – Efficiency Technology and Cost Assessment for U.S. 2025-2030 Light Duty Vehicles concludes that emerging efficiency technologies are expanding the frontier for internal combustion engine vehicles. ICCT examined extensive US EPA technical analysis, state-of-the art modeling and underlying peer-reviewed reports associated with 2025 US fuel efficiency standards (the same efficiency standards adopted by Canada) and then estimated the technical potential and cost of continued fleet improvements for new vehicles through 2030.

The analysis found that continually improving technologies like cylinder deactivation, high compression Atkinson cycle engines, lightweighting and mild hybridization will each enable several per cent greater CO2 reduction benefits than previously forecast, and at significantly lower cost. The ICCT analysis makes it clear that conventional vehicle innovation is an important component of the ‘clean-tech’ agenda going forward.

According to ICCT, the impacts on new vehicle fuel economy will be ‘profound’. New vehicles in 2030 could consume at least 40% less fuel per mile than new 2016 vehicles. Moreover, this greater efficiency can be achieved cost-effectively, with fuel cost savings 2 to 3 times the technology costs.

For Canadians conflicted by the desire to ‘make a difference’ and the potential cost/affordability and lifestyle implications of emissions reductions, this is welcome news. They can be confident that for years to come, a new fuel efficient gasoline or diesel vehicle is a responsible choice that will meaningfully contribute to reducing transport GHG emissions, and help Canada achieve its Paris target, without posing a significant personal cost or change in lifestyle.

Moreover, they should be wary of expensive and impractical policy agendas that deliver little in the way of real emissions reductions, and could constrain their ability to determine the vehicle choice that best meets their needs and circumstances, delivering the value they expect.