Reduction of fossil fuel pollution

Literature, Russian Literature

ID No. Reduction of Fossil Fuel Pollution Transportation is a primary component in economic growth and development. Automobiles are especially useful for transportation to and from work or to attend important meetings or events. But would it do people any good to stop using personal vehicles since they are degrading the environment? Studies have revealed that gasoline powered vehicles contribute a great deal to the depletion of the ozone layer. At present, the ozone layer is already in its critical state. The depleted zone in the South Pole known as the “ ozone hole” is rapidly deteriorating with the reaction of bromine and chlorine (Ozone Hole Watch, par. 5). Depletion of the ozone layer increases the ultraviolet rays that penetrate the earth’s surface (A Giant Sunshade, par. 4). UV rays not only cause diseases such as cancer and cataract, they also affect the environment and ecology (e. g. global warming, disruption of sea food chain involving phytoplankton or shrimp) and increases air pollution (pars. 1-4). Carbon dioxide (CO2) is said to be the great contributor to global warming with eight billion tons being released into the atmosphere in 2010 (Causes of Global, par. 4). Although carbon dioxide also comes from other sources (e. g. volcanic eruption, breathing of man and animals), fossil fuels from vehicles and manufacturing or processing plants contributed much to the emissions (par. 4). Thirty three percent of the total CO2 emissions comes from automobiles and trucks (par. 4) which is a significant quantity. People should lessen CO2 emissions in order to dampen the increasing depletion of the ozone layer. It might be impossible to forego the use of fossil based fuels such as gasoline and diesel. Totally ceasing their use would affect human activity and development. There are already alternative fuels and sources of

energy at present but they cannot be used to substitute fossil fuels. Although there is a great need to clean up the environment and lessen the pollutants released into the environment, there is no viable system and infrastructure that can be put in place to cease CO2 emissions. However, everyone can do his or her share in CO2 emission reduction by using alternative fuel-powered personal cars. Ethanol fuel, or ethyl alcohol, is becoming popular in Europe and the US (Ethanol Fuel par. 1). Cars can run at 10 percent ethanol (E10) without engine modification (par. 1). E85 ethanol (85 % ethanol) can be reduced to E70 (in the US) and E75 (in Sweden) during winter (par. 1). However, ethanol fuel is not 100 percent ethyl alcohol and still adds up to the pollution. Electric cars can be a viable alternative to lessen release of CO2 into the atmosphere. Prof. Alek Samarin, sustainable development consultant and former research director at University of Wollongong, said that electric vehicles are around “ 97 percent cleaner than petrol-powered cars” (Third Generation EV, Health Benefits, par. 3). The car manufacturing sector is already producing electric cars but they are expensive. There are also electric cars available for lease. Although the cost of the electric car can be compensated in the long run since fuel consumption is lesser, many car owners and drivers might find it beyond their budget. The government though can provide incentives to electric car buyers to induce them buy them instead of fossil fuel cars. In 2009, UK Transport Secretary Geoff Hoon and Business Secretary Lord Mandelson proposed the grant of ? 5, 000 incentive to motorists who buy electric cars (Irvine pars. 1-2). The US federal government and the local governments are also providing incentives to electric car buyers and users in the form of tax credits or tax incentives

(What are the Government, par. 2). The minimum tax credit is around $2, 500 and the ceiling varies depending on the capacity of the battery storage (par. 2). On the other hand, the government may increase the tariff or tax on fossil fuels such as gasoline and diesel. Tax can be allocated to fund electric car researches, subsidize purchase or grant tax incentives. Maximizing the use of electric powered mass transport vehicles such as light rail systems and subways can greatly reduce CO2 emissions. Thus, more of these mass transport vehicles should be constructed and slowly phase out trains that use coal, another fossil fuel that also produce CO2 as a by-product. Another mass transport vehicle, the buses, should also adapt electric as its power source. The purchase by City of Montebello in California of 150 gasoline hybrid-electric buses (California City Buys, par. 1) is a move to lessen CO2 emissions. This is a good transition toward total electric powered buses. The government can also pass laws that would increase the tariff on imported fossil fuels as well as their tax on sales. This can be justified on the ground of the fuel’s contribution to environmental degradation. But when crude oil processing plants and importers, and sellers of fossil fuels contribute to carbon capture, the government may also grant them tax credits. In a year, driving an electric vehicle reduces the amount of air pollutants by 17 pounds of hydrocarbons, 14 pounds of nitrogen oxides, and 200 pounds of carbon monoxide. Gasoline powered cars emit pollutants whenever the engine is running, and even by just starting them. Much of the pollution in the rivers, bays and ground water is due to automobile waste fluids being dumped or spilled into storm drains. Electric cars do not contribute to oil spillage, use recyclable batteries (that lessen pollution caused by manufacturing), and can

save money (overnight charging costs around $20 a month, driving the same distance would cost $75 lower) for the car owner in the long run. Electric cars are good for city driving but not for long distance travel. However, with research and improved technology, it will not be long when these cars will be able to travel in the countryside or between states. All personal vehicles, mass-transport vehicles, and cargo and transport trucks should all be converted to electric for power source. This cannot be easily done at present. But with improved technology; greater affordability; change in mindset of people; and assistance from the government, private and manufacturing sector, fossil fuel powered vehicles will no longer be running the streets in the future. Works Cited A Giant Sunshade. Dead Trees EF! n. d. 29 March 2011. . California City Buys 150 Gasoline Hybrid-electric Buses. Commercial Carrier Journal. 01 June 2007. 31 March 2011. . Causes of Global Warming. GlobalWarming. com. 2011. 29 March 2011. . Ethanol Fuel and Cars. Interesting Energy Facts. 23 September 2008. 29 March 2011. Irvine, Chris. Electric Car Buyers to be Given ? 5, 000 in Incentives. 16 April 2009. 30 March 2011. . Ozone Hole Watch. NASA. 31 December 2010. 29 March 2011. . Third Generation EV from Australian Rival to iMev and Leaf . V is for Voltage Forums. 18 February 2011. 31 March 2011. . What Are the Government Incentives for Electric Cars? Planet Green. 27 October 2010. 30 March 2011. .