CHAPTER 6

HEALTH CO-BENEFITS OF CLIMATE ACTION

Slowing climate change requires drastic cuts in greenhouse gas emissions, mostly from phasing out coal and oil to make electricity and gasoline for transportation. A **clean electricity system** – one that relies mostly on renewable sources such as hydro, solar, wind, and sustainable biofuels – will power zero-emitting transportation, homes, buildings, and industrial processes.

Table 11 describes potential health co-benefits of climate action as summarized in the 2019 report by the Canadian Association of Physicians for the Environment (CAPE). According to the CAPE report, a clean energy system cuts air pollution, reducing the risk of cardiovascular disease, chronic and acute respiratory illnesses, lung cancer, and preterm births. It can improve indoor air quality, and help reduce energy poverty because we spend less money on energy. These are co-benefits of climate action.

Ontario already benefits from some of these co-benefits. Ontario is the first province to phase out coal from electricity generation. As a result, according to a 2017 **Pembina Institute report**, smog days declined from **53 in 2005 to zero in 2014**, while cutting greenhouse gas emissions by seven per cent.

A more active lifestyle can reduce reliance on gasoline-powered vehicles and increase physical activity, which in turn can help **reduce chronic diseases and mental health** issues associated with inactivity. More green space in our communities can keep us cool on hot days, create places for us to walk and play, and also improve our **mental health and well-being**.

The change required to solve climate change and reap the co-benefits will take work. We can take steps now to build momentum and to accelerate the shift to a clean energy system, more sustainable forest and agriculture management, and community development that reduces automobile dependency. We can address climate change while meeting objectives the province has set for improving wellness and aging.

TABLE 11 Health co-benefits of climate action: Highlights

Action	Benefits for climate	Benefits for health
Energy use and production ▪ Replacing fossil fuels with renewable energies ▪ Reduce the demand for energy through energy efficiency and other measures ▪ Improve energy efficiency in buildings	▪ Reduce emissions of carbon dioxide, black carbon, methane and other climate pollutants	▪ Improve air quality by reducing exposure to outdoor air pollution with a corresponding reduction in risk of cardiovascular disease, chronic and acute respiratory illnesses, lung cancer, and preterm birth ▪ Improve indoor environments to reduce energy poverty and respiratory and cardiovascular illnesses
Transportation ▪ Increase fuel efficiency ▪ Use alternative fuels ▪ Decrease the demand for motorized transportation ▪ Give higher priority to active transportation and walking environment	▪ Reduce emissions of climate pollutants by reducing vehicle travel and lowering emissions from vehicles	▪ Improve air quality with a corresponding reduction in health impacts (see above) ▪ Increase physical activity which reduces the risk of all-cause mortality, cardiovascular disease, obesity, type 11 diabetes, and certain types of cancer ▪ Fewer vehicle-related deaths and injuries from improved cycling and walking infrastructure
Buildings and communities ▪ Increase urban density and diversity of land uses ▪ Increase urban green spaces and forests	▪ Reduce emissions of climate pollutants by reducing vehicle travel and emissions from vehicles ▪ Reduce atmospheric carbon dioxide by sequestering carbon in plants and soil and reducing cooling needs	▪ Improve air quality by reducing vehicle travel ▪ Increase physical activity by fostering active travel ▪ Reduce ambient temperatures and heat island effect with green space ▪ Reduce noise pollution with increased green space ▪ Improve mental health with increased access to green space ▪ Improve water quality with increased green space
Food consumption ▪ Shift diets to emphasize foods of plant origin ▪ Reducing the amount of food that is wasted	▪ Lower carbon dioxide and methane emissions from energy-intensive livestock systems and less food waste	▪ Improve diets (less meat, more fruits and vegetables) which decreases risk of heart disease, stroke, colorectal cancer, diabetes and other diseases ▪ Improve food security ▪ Improve air quality by reducing methane emissions that contribute to ground-level ozone

Source: Perrota, K. (2019). *Climate Change Toolkit for Health Professionals, p. 2. Retrieved from: https://cape.ca/campaigns/climate-health-policy/climate-change-toolkit-for-health-professionals/*