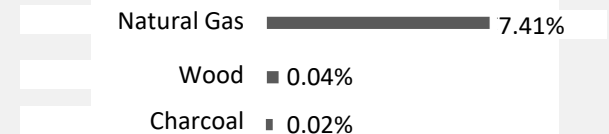
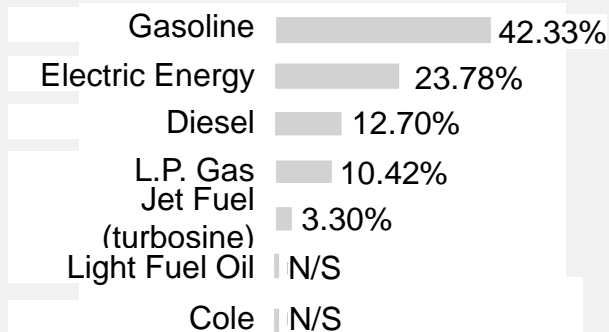


AIR POLLUTION- HOW RENEWABLES CAN TACKLE THIS CHALLENGE?

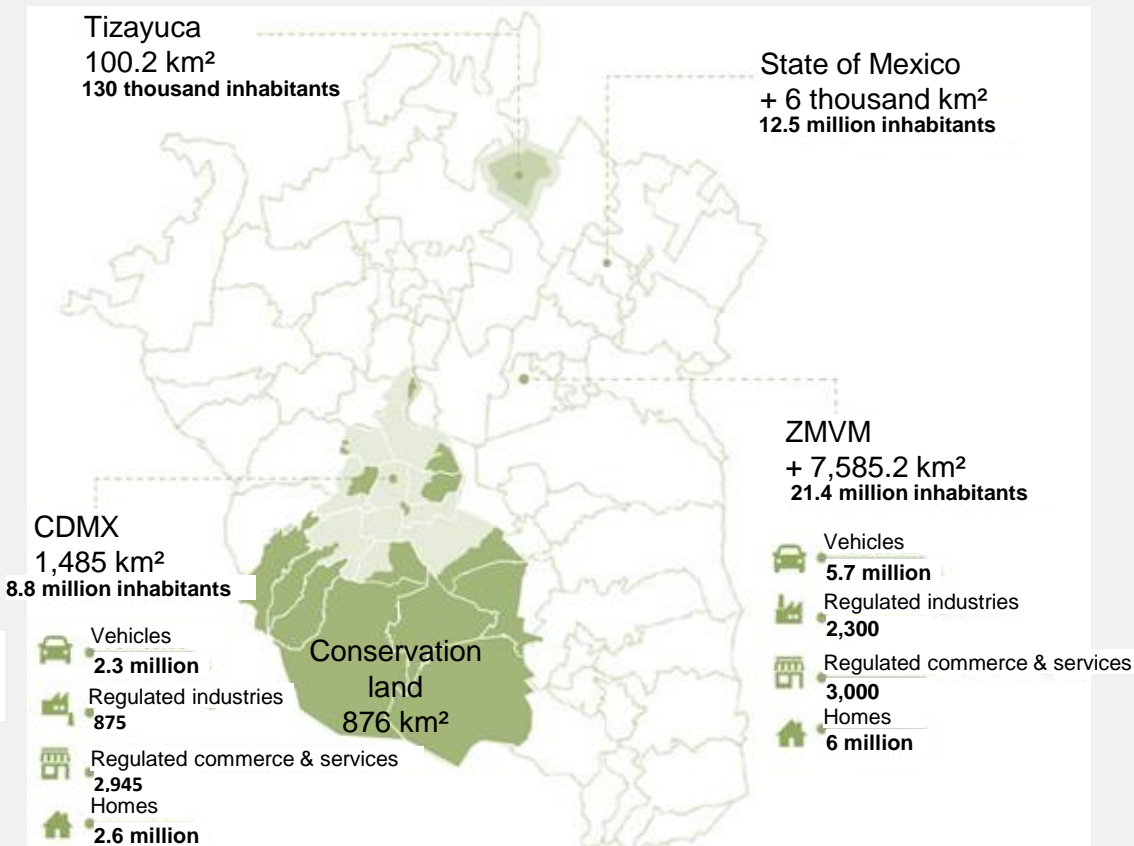
CASE STUDY MEXICO CITY



MEXICO CITY: SOME KEY DATA



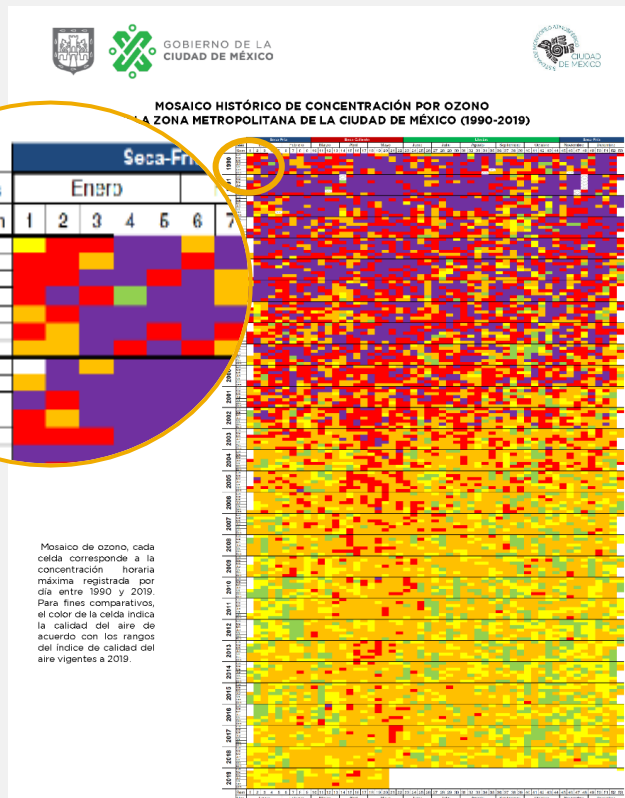
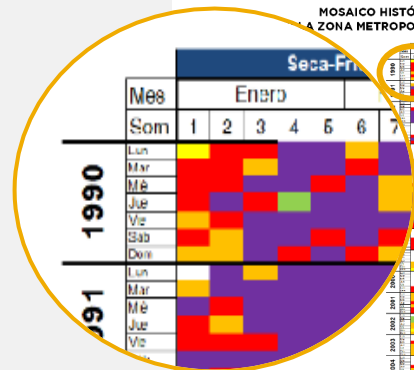
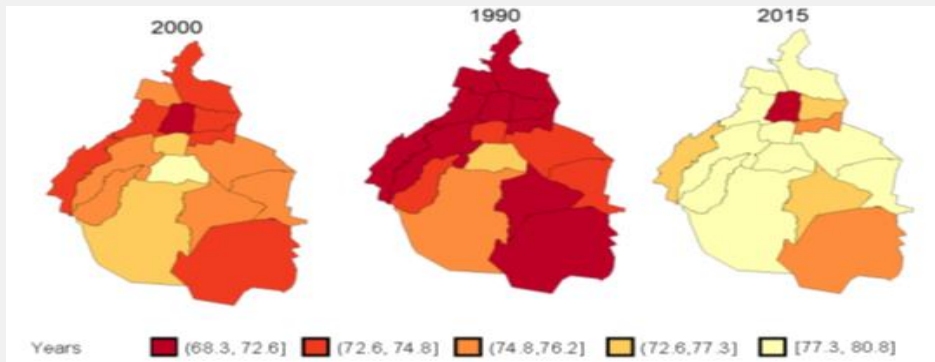
1PJ= 1×10^{15} Joules calories
 1 Joule= 0.2388 calories



HEALTH ASSESSMENT: EVIDENCE FOR IMPACTS OF AIR QUALITY IMPROVEMENTS

TRENDS IN MAXIMUM OZONE HOURLY CONCENTRATION 1990-2019

Life Expectancy 1990 to 2015



HOW RENEWAL ENERGY COULD CONTRIBUTE TO IMPROVE AIR QUALITY?

Mexico City Renewal energy program (2019-2024)

- Solar city program
 - solar water heaters
 - 153,851 homes + commerces (787,000 m2)
 - Fotovoltaic systems <500 kWp 200 MW
 - 300 Government buildings 21.9GWh/y
 - Food distribution center: 25MW
- Energy efficiency: 153,931 KWh/y savings
- Bioenergy (from waste at the distribution center): 5.2-18 GWh/y
- Biogas from landfill: 104 GWh/y
- Biodiesel: substitute 0.15%/y of diesel consumption
- 2e6 Mg CO2
- 447 ton/y NO2, 5.5 ton BC, 41 ton PM2.5



THE CHALLENGE: ENERGY FROM FOSSIL FUELS



Sulfur dioxide
plume from Tula
power plant and
Refinery complex

