

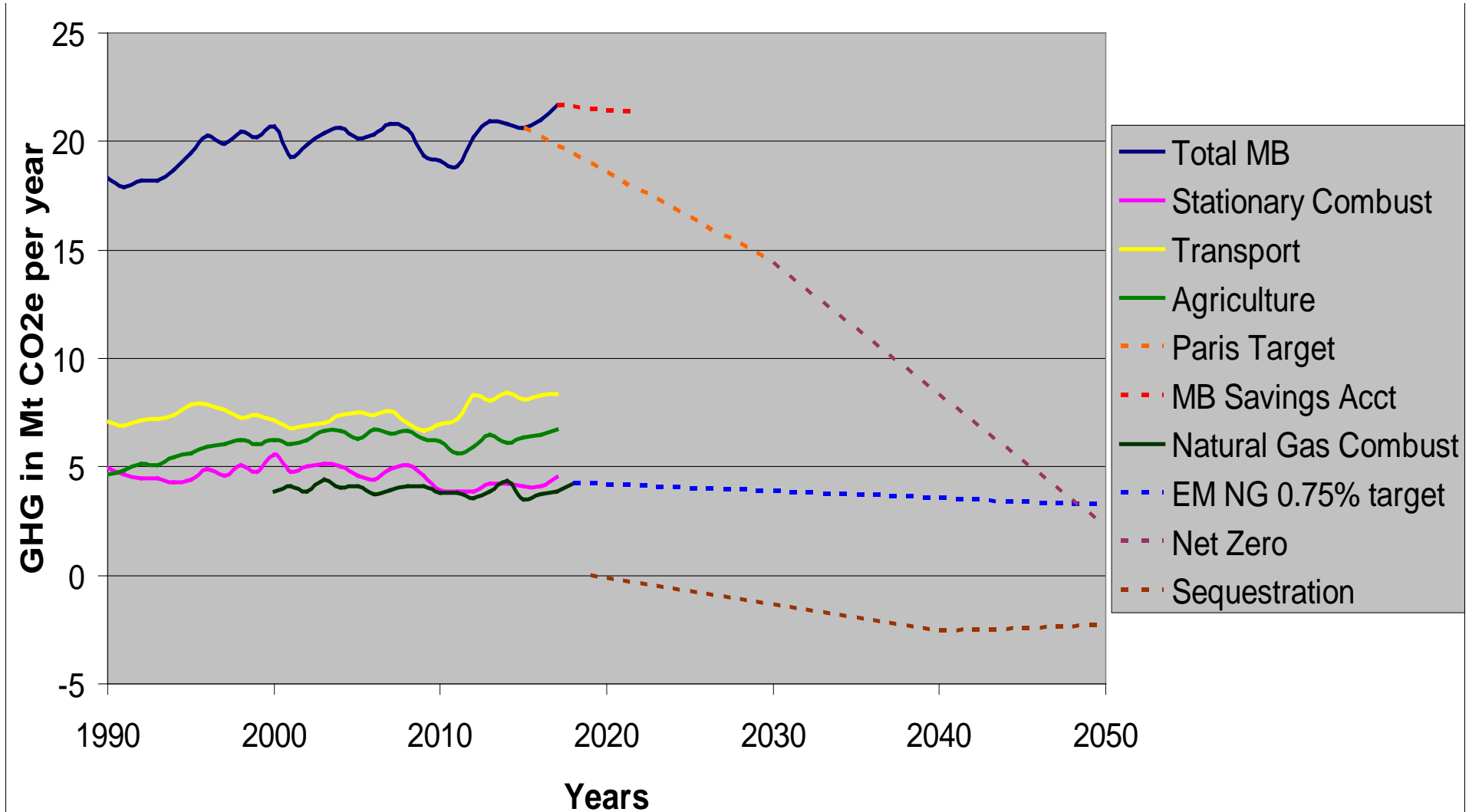
# Council of Canadian Winnipeg Chapter Presentation by D.M. LeNeveu

- The Council of Canadians (CC) is a non profit corporation established in 1985 sustained by donations of volunteer supporters
- The Winnipeg Chapter is recognized by the Bylaws of the CC
- There are 4,400 supporters in Manitoba
- The CC mission is to promote economic and social justice and protect and expand the commons
- CC campaigns include water rights, environmental protection, trade agreements, climate change and aboriginal rights
- Our presentation focuses on the efficacy of EM proposed DSM natural gas savings and on the climate change implications of the savings

# The Efficiency Manitoba Act Provisions We Address

- **Mandatory considerations 11(4)** (b) the benefits and cost-effectiveness of the initiatives proposed in the plan
- **Efficiency Plans 9(e)** an analysis of the reductions in greenhouse gas emissions in Manitoba expected to result from the initiatives proposed
- **Natural Gas Savings Targets** incremental net savings that are at least equal to 0.75% of the consumption of natural gas in the immediately preceding year.
- **Regulations — general prescribing factors which the PUB must consider** h(ii) the societal benefits to be achieved by all or a portion of Efficiency Manitoba's initiatives
- **Definitions:** "consumption" means on a weather-adjusted basis

# Manitoba GHG Emissions



# The Efficiency Trap / Jevons Paradox

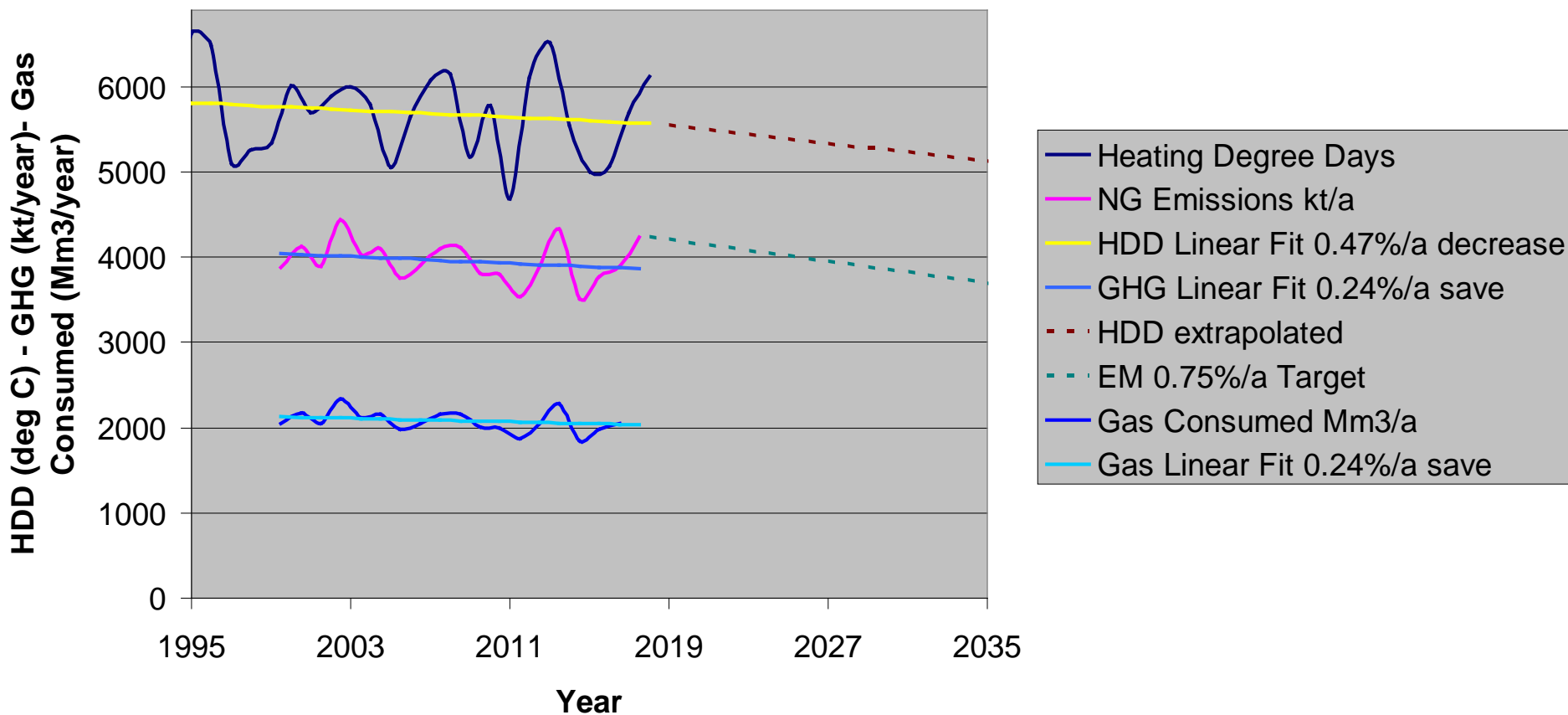
- Growth in consumption always outweighs savings from efficiency
- Efficiency measures such as furnace replacement lock in fossil fuel emissions and prevent meeting climate change targets

# EM natural gas savings target of 0.75% per year is optimistic Growth Outweighs Efficiency

- DSM natural gas savings historically from 2001 to 2018 average 0.32% per annum
- Natural gas customer growth from 2001 to 2018 has averaged 0.6%
- Why is not natural gas consumption increasing with time?

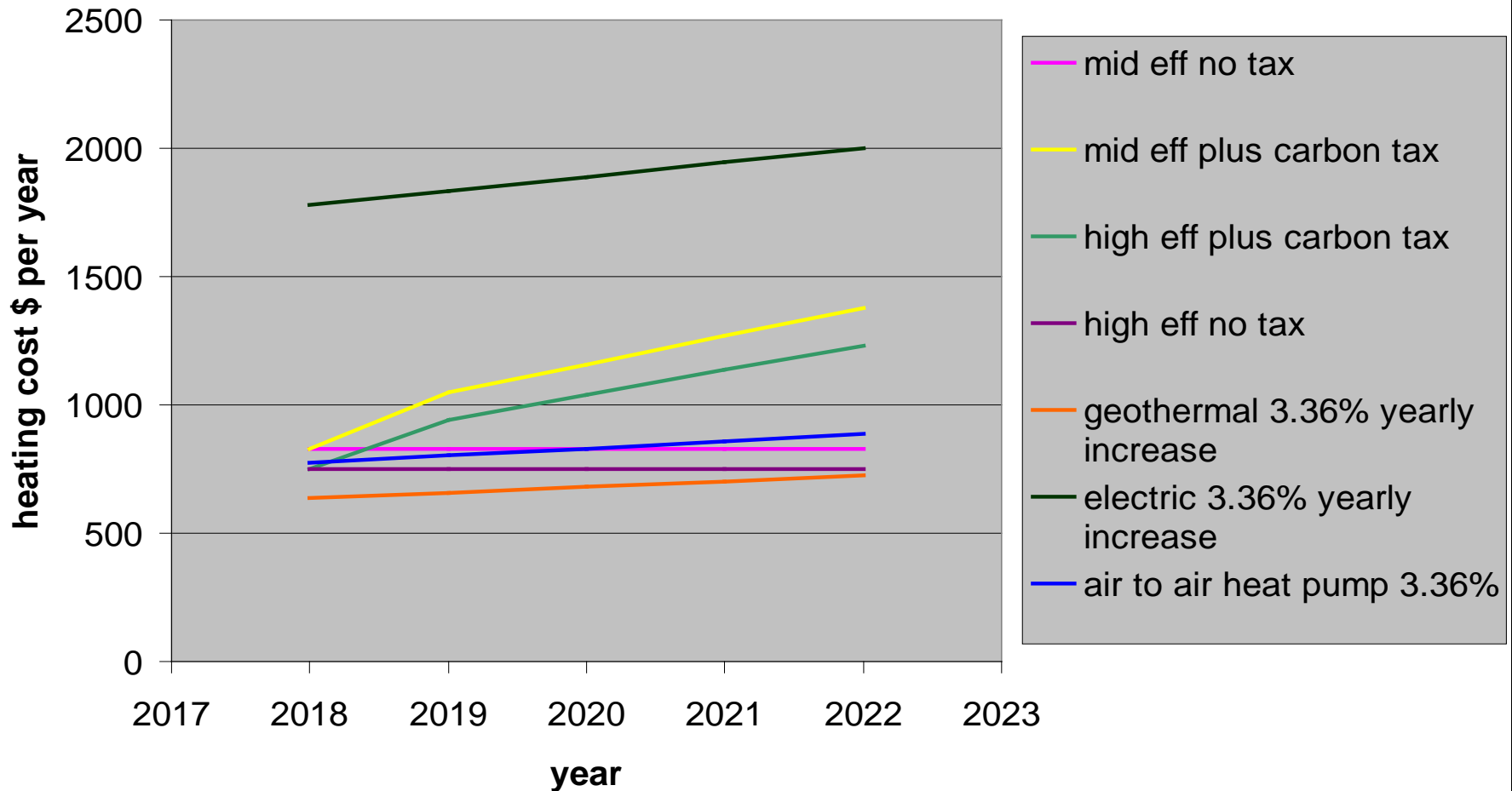
# The decrease in Heating Degree Days driven by climate change reduces natural gas consumption

## Heating Degree Days - Natural Gas Emissions - Natural Gas Consumed



# Heat Pumps beat natural gas heating for efficiency and GHG emissions

## Heating Cost for Recent 2 Storey 2000 sq. Foot Home



# Conclusion and Recommendations

- Weather adjusted consumption of natural gas based on HDD should result in
  - 1) Growth in natural gas consumption will outweigh savings from EM efficiency measures consistent with Jevons Paradox
  - 2) the 0.75% annual natural gas savings target will not be met
  - 3) NPV natural gas savings benefits will be negative invalidating all the PACT cost test and LRI (lifecycle revenue impact) calculations
- EM natural gas efficiency measures such as furnace replacement will lock in GHG emissions for decades and prevent emissions reduction.
- Heat pumps are more effective for natural gas savings and greenhouse gas reduction than increased efficiency of natural gas combustion
- To benefit society the PUB should hold hearings on climate change mitigation that brings together MB Hydro, Centra and EM
- EM plans should include
  - 1) transition away from fossil fuels including natural gas,
  - 2) replacement of incentives for more efficient natural gas heating with heat pump replacement programs designed to meet climate change targets.