

WEBINAR

THE ECONOMIC IMPACT OF ENERGY EFFICIENCY



Efficiency
Canada

The national voice for an
energy efficient economy



MAY 11, 2018

THE EVOLUTION FROM:



THE EVOLUTION FROM:



McConnell



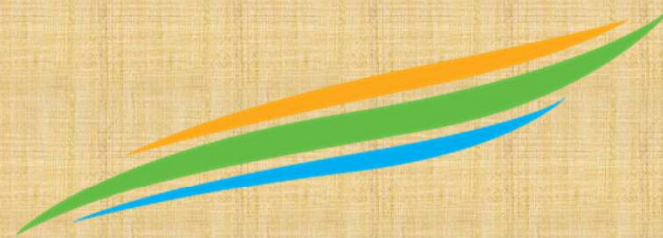
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UNIVERSITY

THE EVOLUTION TO:



Efficiency
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energy efficient economy



INTRODUCING:
NEW LEADERSHIP

COREY DIAMOND
EXECUTIVE DIRECTOR



INTRODUCING:
NEW LEADERSHIP

BRENDAN HALEY
DIRECTOR, POLICY

EFFICIENCY CANADA:

THE NATIONAL VOICE FOR
AN ENERGY EFFICIENT
ECONOMY

EFFICIENCY CANADA:

ADVOCATE.

CONVENE.

COMMUNICATE.

EFFICIENCY CANADA:
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CONVENE.

EFFICIENCY CANADA:

COMMUNICATE.

BY 2025
WE ENVISION A
CANADA WHERE
ENERGY
EFFICIENCY IS:

1. WIDELY TREATED AS THE “**FIRST FUEL**” BY GOVERNMENTS, REGULATORS, UTILITIES AND CONSUMERS.

2. IMPROVING BY AT LEAST **2% PER YEAR**, DOUBLE THE HISTORIC RATE OF IMPROVEMENT.

3. SUPPORTING **JOB GROWTH** ACROSS ALL SECTORS, TRADES AND PROVINCES.

NEW RESEARCH ON ECONOMIC IMPACTS OF ENERGY EFFICIENCY



CLEAN ENERGY CANADA



Efficiency Canada

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energy efficient economy

STUDY AUTHORS

Dunsky
Energy
Consulting

*supported by the
Centre for Spatial
Economics*

DUNSKY OVERVIEW



EXPERTISE



EFFICIENCY



RENEWABLES



MOBILITY

SERVICES



ASSESS
opportunities



DESIGN
strategies



EVALUATE
performance

Governments • Utilities • **CLIENTELE*** • Private firms • Non-profits



* selection of clients

dunsky
ENERGY CONSULTING

STUDY SCOPE

SECTORS



FUEL TYPES

ALL FUELS – electricity, natural gas, heating fuels

SCENARIOS

“PCF” – energy efficiency actions in the Pan-Canadian Framework

“PCF+” – energy efficiency gains roughly in line with leaders across Canada/U.S.

IMPACTS

NET IMPACT on GDP, employment, GHGs

TIMEFRAME

2017-2030

REGIONS

CANADA + 10 PROVINCES individually (*no territories*)

PAN-CANADIAN FRAMEWORK

ENERGY EFFICIENCY ACTIONS

- | | | |
|-------------------|-----------------------------------|--|
| BUILT ENVIRONMENT | • EXISTING HOUSING | – 10% reduction in energy use through retrofits |
| | • NEW HOUSING | – 40% improvement from 2012 model code as new codes evolve toward “net-zero ready” by 2030 |
| | • EXISTING BUILDINGS | – 17% reduction in energy use through energy management and retrofits |
| | • NEW BUILDINGS | – 65% improvement from 2015 model code as new codes evolve toward “net-zero ready” by 2030 |
| | • APPLIANCES AND EQUIPMENT | – More stringent energy efficiency standards |
| INDUSTRY | • LARGE INDUSTRY | – Energy management and emissions standards |

RESULTS (PAN-CANADIAN FRAMEWORK SCENARIO)



+1% boost in GDP
over 14 years

\$7 GDP boost / \$1 of spending



+118,000 Jobs
annual average (FTE)

Peaking at 227K FTE jobs



+\$1.4B Savings
for Canadian households

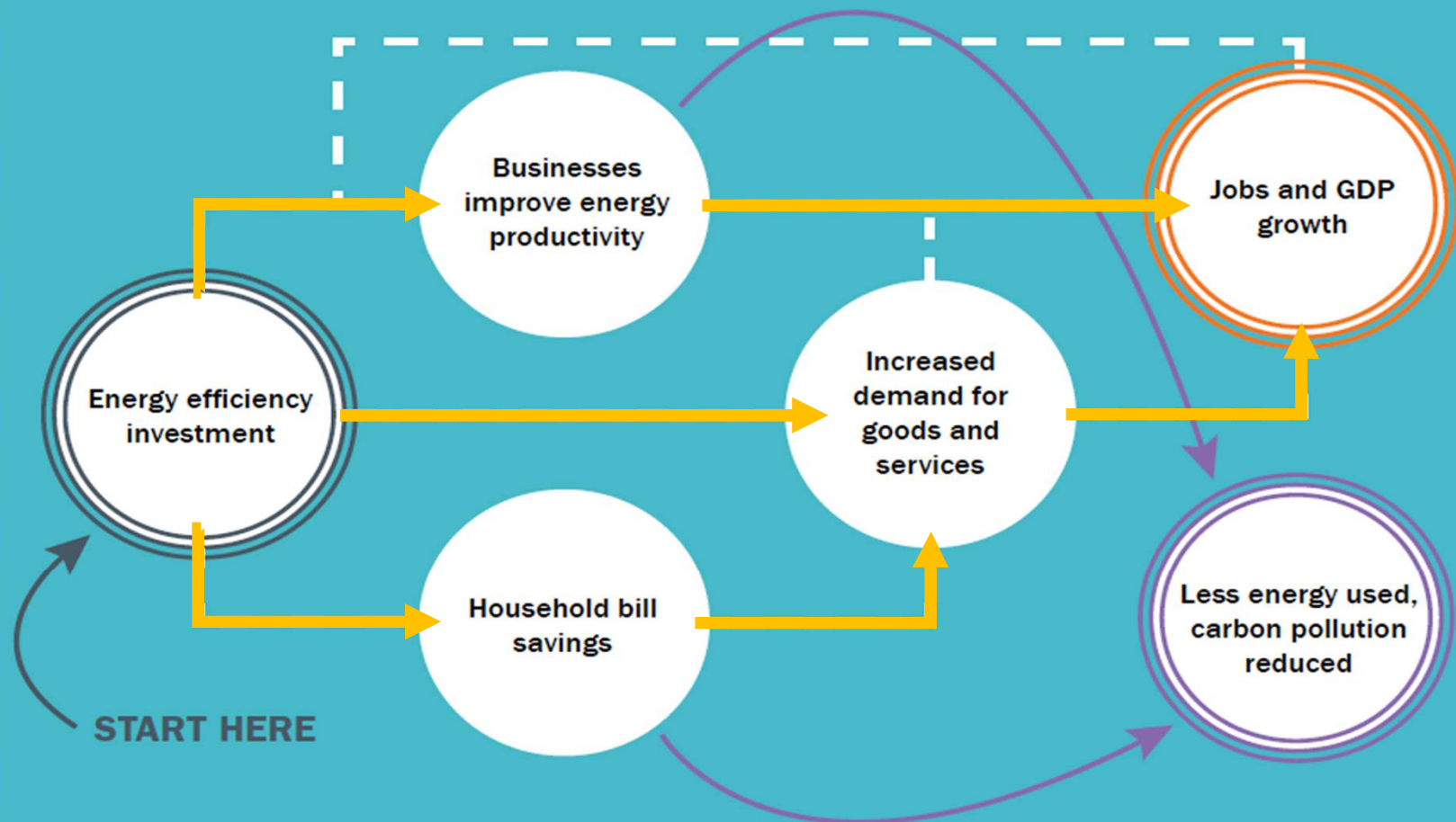
average \$114/year per household



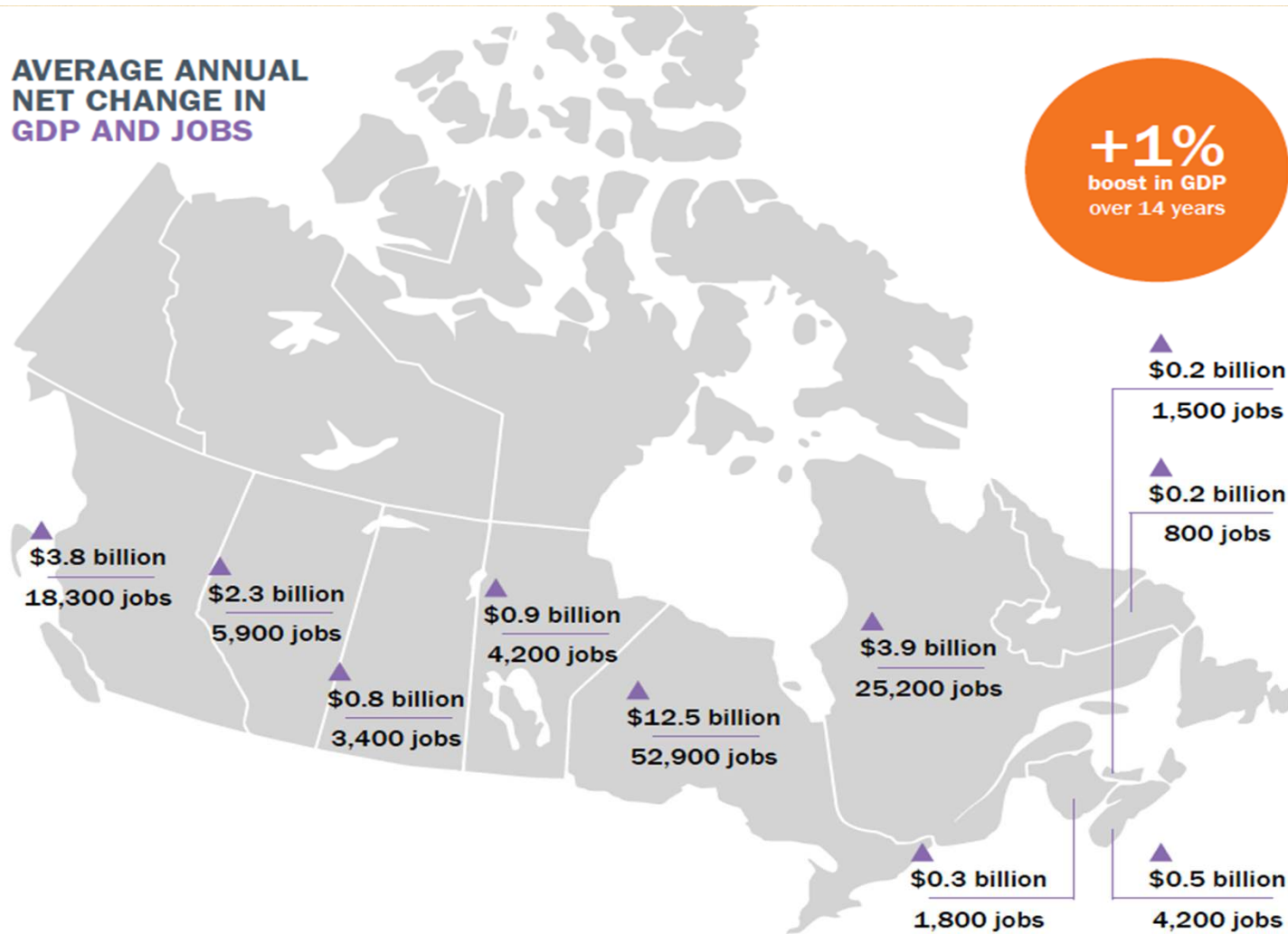
-52M tonnes
emissions of CO₂e by 2030

25% of Canada's Paris commitment

HOW DOES
**ENERGY
EFFICIENCY**
GENERATE
**JOBS &
GROWTH**
?



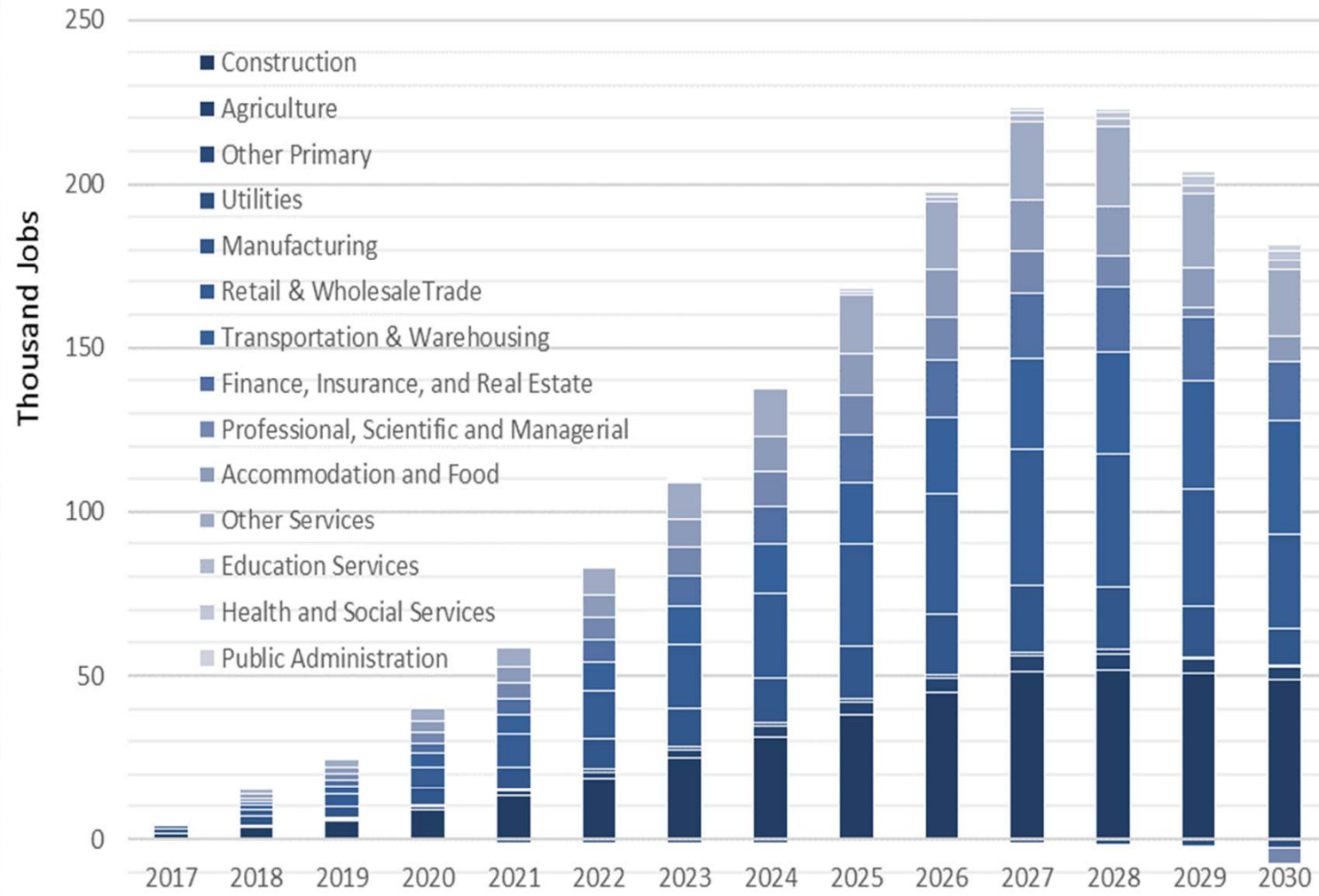
AVERAGE ANNUAL NET CHANGE IN GDP AND JOBS



Despite different energy, emissions and economic contexts, **the economies and workforces of every province benefit** from the PCF's energy efficiency measures.

Employment gains
from the PCF's
efficiency measures
are spread widely
across the economy.

Half of new jobs
would fall within
**CONSTRUCTION,
TRADE, &
MANUFACTURING**



NOTEWORTHY

- **The majority of benefits – 75-85% – comes from energy bill savings,** which increase household disposable income and improve competitiveness by lowering the cost of doing business.
- **Study's scope is limited to energy efficiency in homes, buildings and industry.** It does not account for electrification and fuel switching within the building sector, nor for transportation-related energy efficiency.
- ***Net impact* assessment means results account for gains *and* losses.** Positive results reflect economic benefits that far outweigh costs to governments, households, and businesses to implement energy efficiency actions, as well as impacts of reduced energy sales on utilities.

QUESTIONS?

DUNSKY ENERGY CONSULTING



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ASSESS opportunities



DESIGN strategies




EVALUATE
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* selection of clients





ENERGY
EFFICIENCY
WORKS!

Q₁₀

A₁

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