



State of Israel

Israel's Intended Nationally Determined Contribution to UNFCCC

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Background information

Environment & Sustainable
Development Administration
MINISTRY OF ECONOMY

- Population: 8.3 million
 - 1.8% annual growth
 - 93% urban
 - 60% coastal
 - Density: 365p/km²
- GDP pc \$36,900
 - 67% services
 - 30% industry
 - 3% agriculture
- CO₂ emissions – 85%
- Energy generation – 55%



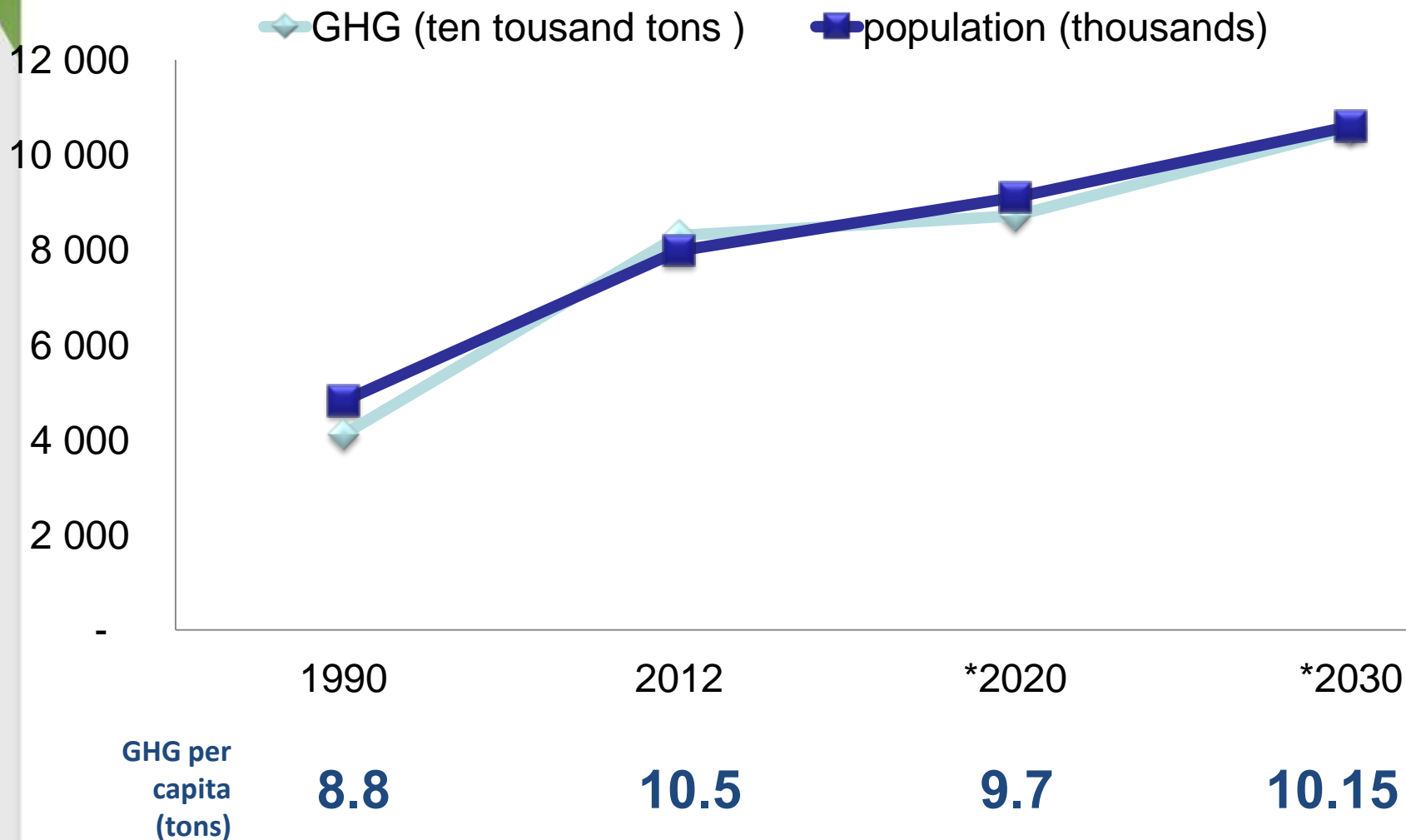
Meeting the Challenge

National circumstances

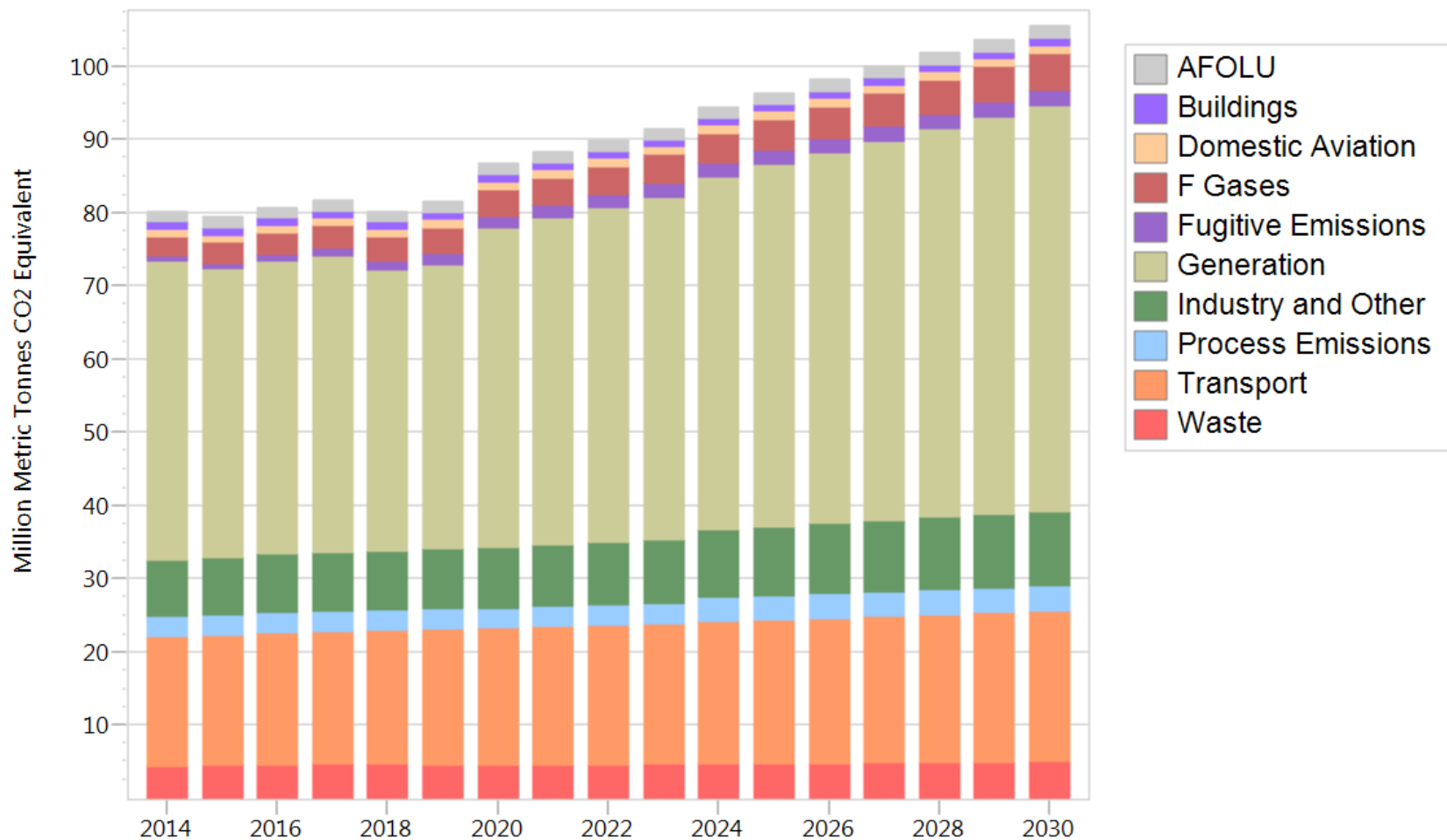
- High population growth rate (~1.8%)
- High GDP growth rate
- Land scarcity
- Heavy Reliance on fossil fuels. No hydro, geothermal, nuclear energy
- “Energy island” without grid interconnectivity
- Electricity demand - 3.4% per year
- Arid climate – desalination, temperature control

Population growth

source:



BAU Emissions



2030 Target

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✓ **7.7 ton CO₂e per capita (BAU - 10.15)**

✓ **2025 - 8.8 ton CO₂e per capita**

✓ Emission reduction to be achieved mainly through key measures in power sector

- Renewable energy

- Changes to merit order to include externalities and carbon pricing

- Energy efficiency

- Increased use of public transport

Implementation in 2030



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Energy efficiency – 17% reduction

In electricity consumption

- ✓ EE fund
- ✓ Regulations and standards
- ✓ Green building

Renewable energy – 17% electricity generation

- ✓ Competitive quotas
- ✓ RE Tariff

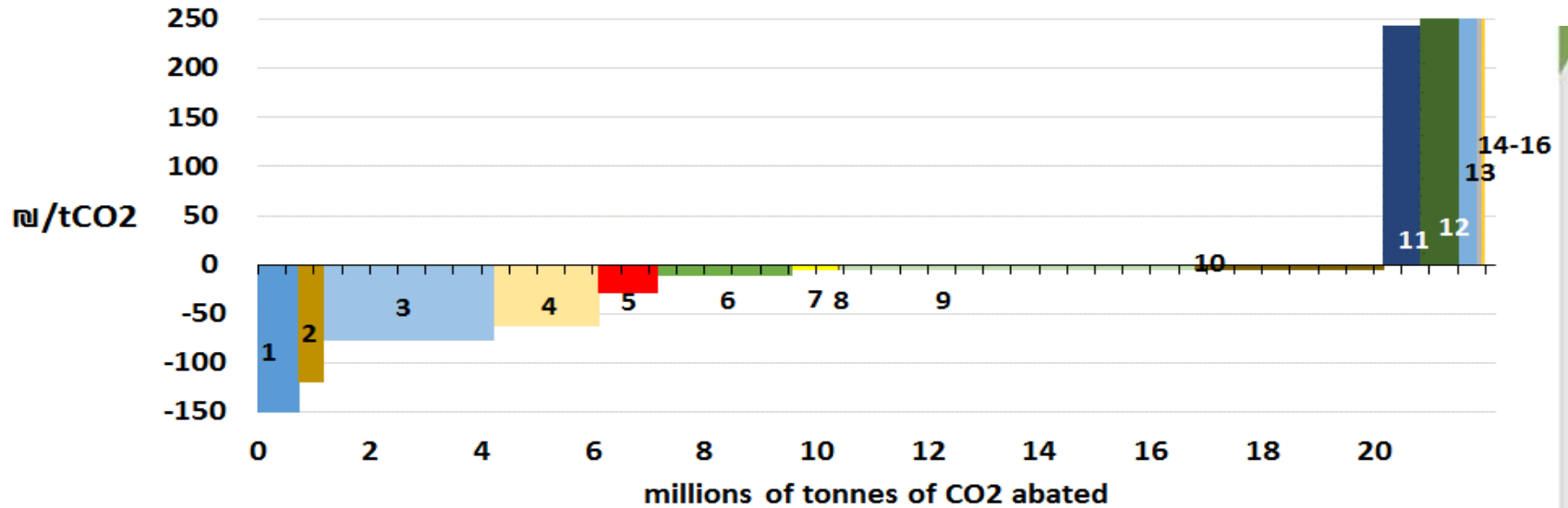
Transportation – 20% shift to public transportation (PT)

- ✓ PT infrastructure

Power sector – switch to natural gas



Power Sector MAC Curve



1: Project D replaced with new CCGT

3: Solar PV Ground

5: CSP (Hybrid biomass)

7: Onshore Wind

9: Merit order switch

11: CSP (Solar Tower with Storage)

13: Biogas

15: Offshore Wind

2: RDF co-firing in coal units

4: Solar PV rooftop

6: CSP (Hybrid gas)

8: Water Pipe Hydro

10: Orot Rabin 1-4 replaced with CCGT

12: CSP (parabolic trough with storage)

14: New Biomass

16: Wave

Economy-wide benefits



State of Israel

