

# 100% TURKMENISTAN

Transition to 100% wind, water, and solar (WWS) for all purposes  
(electricity, transportation, heating/cooling, industry)



Residential rooftop solar  
1.4%



Solar plant  
79.8%



Concentrated solar plant  
0%



Onshore wind  
16%



Offshore wind  
0%

## 2050

PROJECTED  
ENERGY MIX

Commercial/govt rooftop solar  
2.8%



Wave energy  
0%



Geothermal energy  
0%



Hydroelectric  
0%



Tidal turbine  
0%




## 40-Year Jobs Created

Number of jobs where a person is employed for 40 consecutive years

Operation jobs:  106,809

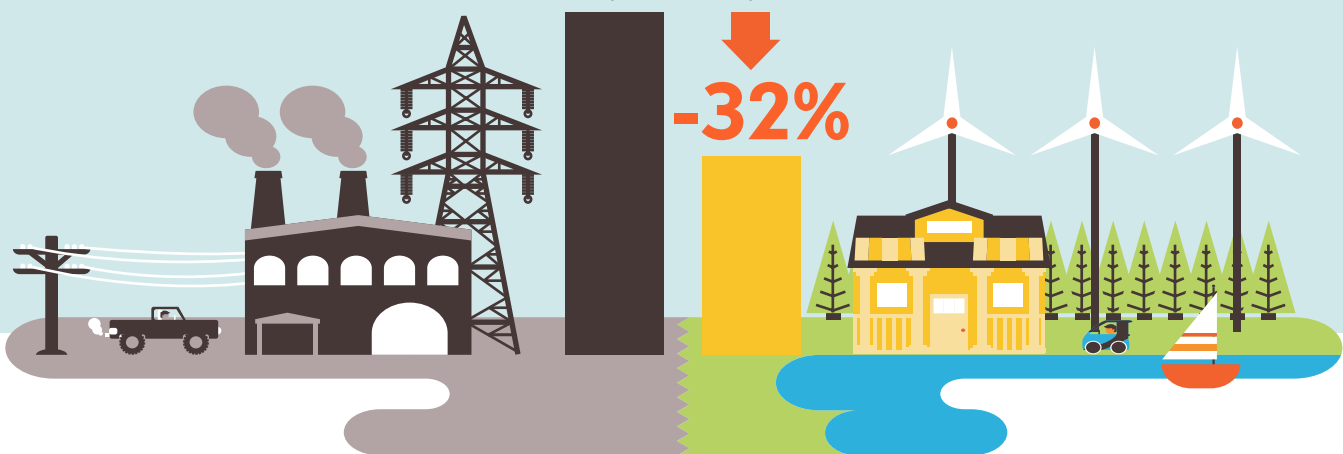
Construction jobs:  81,962

 = 10,000

Using WWS electricity for everything, instead of burning fuel, and improving energy efficiency means you need much less energy.

2050 Demand with BAU

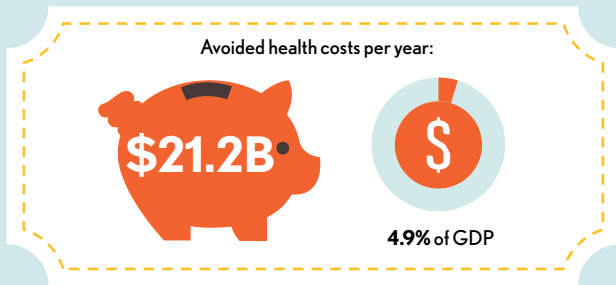
2050 Wind, Water, Solar



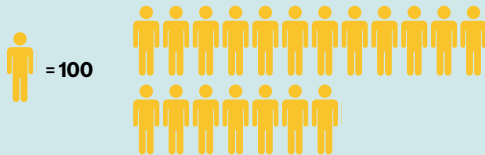
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## Avoided Mortality and Illness Costs



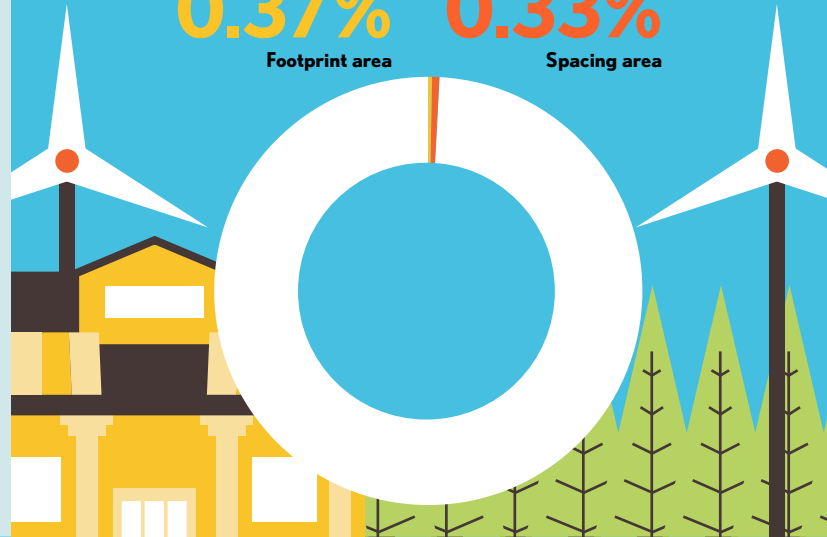
Air pollution deaths avoided every year: **1,901**



Plan pays for itself in as little as **2 years** from air pollution and climate cost savings alone.

## Percentage of Land Needed for All New WWS Generators

**0.37%** Footprint area  
**0.33%** Spacing area



## Future Energy Costs 2050

BAU (Business as usual)      WWS (Wind, water, solar)



Average fossil-fuel energy costs\*

**12.1 c/kWh**

\*Health and climate external costs of fossil fuels are another 5.7c/kWh



Average WWS electricity costs

**6.4 c/kWh**

## Money in Your Pocket

**(P)** = \$1,000

Annual energy, health, and climate cost savings per person in 2050: **\$7,541**



Annual energy cost savings per person in 2050: **\$255**

