

# 2016 BOULDER COMMUNITY GREENHOUSE GAS INVENTORY

Measure our present. Design our future.



## WHAT ARE GHGs?

Greenhouse gases (GHGs) absorb radiation from the sun and trap heat in Earth's atmosphere. The more GHGs there are, the more heat is trapped in our atmosphere, leading to global warming and climate change. GHGs measured here include carbon dioxide, methane and nitrous oxide.

## ABOUT THIS INVENTORY

Since 2005, Boulder has completed multiple GHG inventories to track our community emissions. This 2016 inventory includes more GHG sources than earlier inventories, holding Boulder to a higher reporting standard and giving a more accurate representation of our contribution to climate change. Emissions analysis follows the ICLEI Global Protocol for Community-scale Emissions (GPC) for BASIC level reporting.

## WHY MEASURE?

More than 70% of global carbon emissions come from cities like Boulder. Hundreds of these cities are measuring GHG emissions to track progress and identify new opportunities to lessen negative climate impacts. As part of the Carbon Neutral Cities Alliance, Boulder and 17 leading global cities have committed to reducing their emissions by 80% or more by the year 2050.

98% of Boulder's emissions come from burning fossil fuels to produce electricity, provide heat and power our transportation system. To reach our climate goals, we need to change how we produce, manage and use energy by creating energy systems that are clean, affordable and reliable.

## BOULDER EMISSIONS - PRESENT AND FUTURE

WHERE WE ARE  
**2016**  
1,599,000 MT

OUR GOAL IS AN  
**80% REDUCTION**

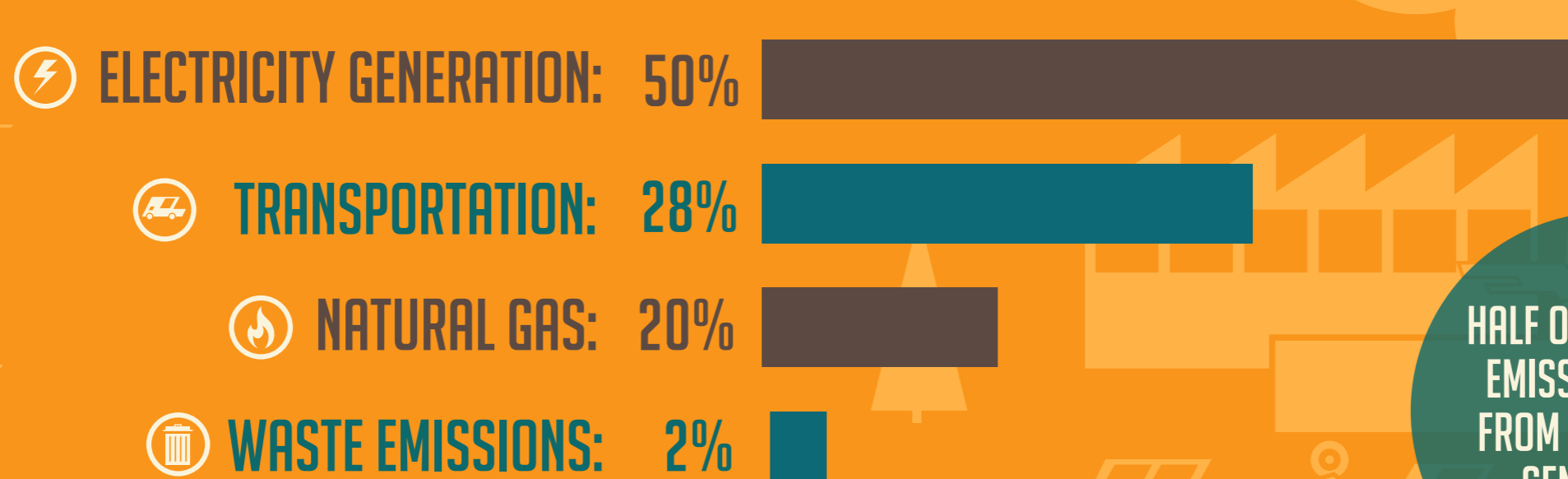
WHERE WE WANT TO BE  
**2050**  
369,000 MT

## HOW DO WE COMPARE? GHG EMISSIONS PER PERSON

COLORADO: 25 MT (2010)  
DENVER, CO: 20 MT (2015)  
BOULDER, CO: 15 MT (2016)  
FORT COLLINS, CO: 13 MT (2016)  
NEW YORK, NY: 6.1 MT (2015)  
BOULDER, CO: 2050: 3 MT

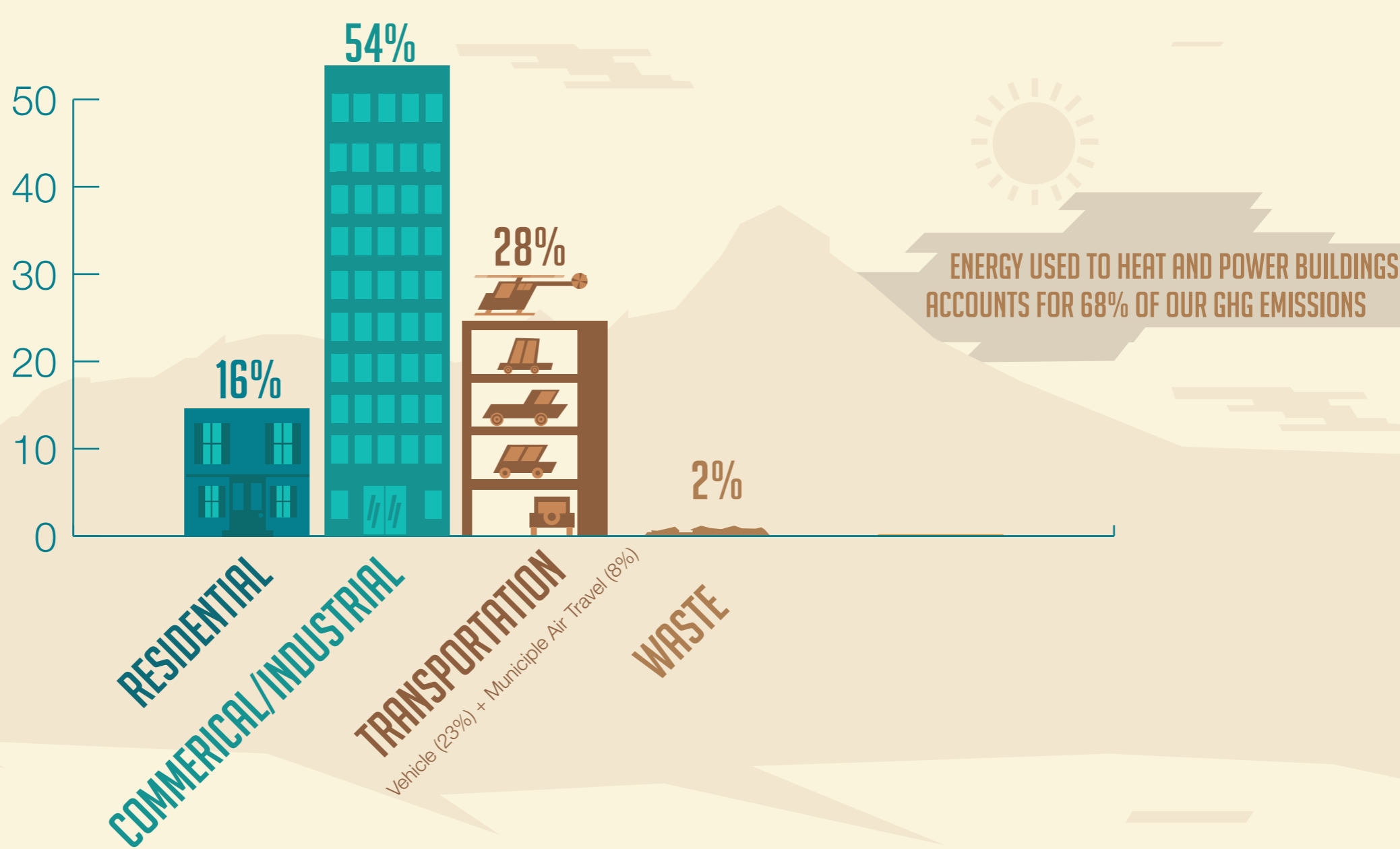
\*MT = metric ton = 2,204 lbs

## WHERE GHGs COME FROM - EMISSIONS BY SOURCE

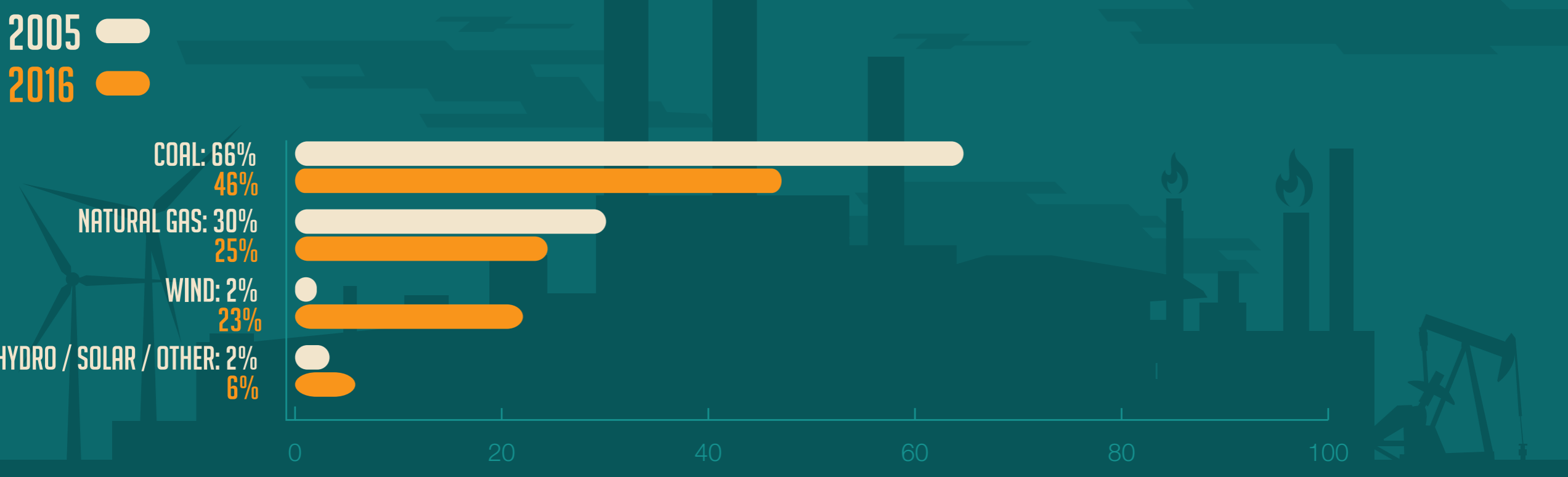


HALF OF BOULDER'S EMISSIONS COME FROM ELECTRICITY GENERATION & USE

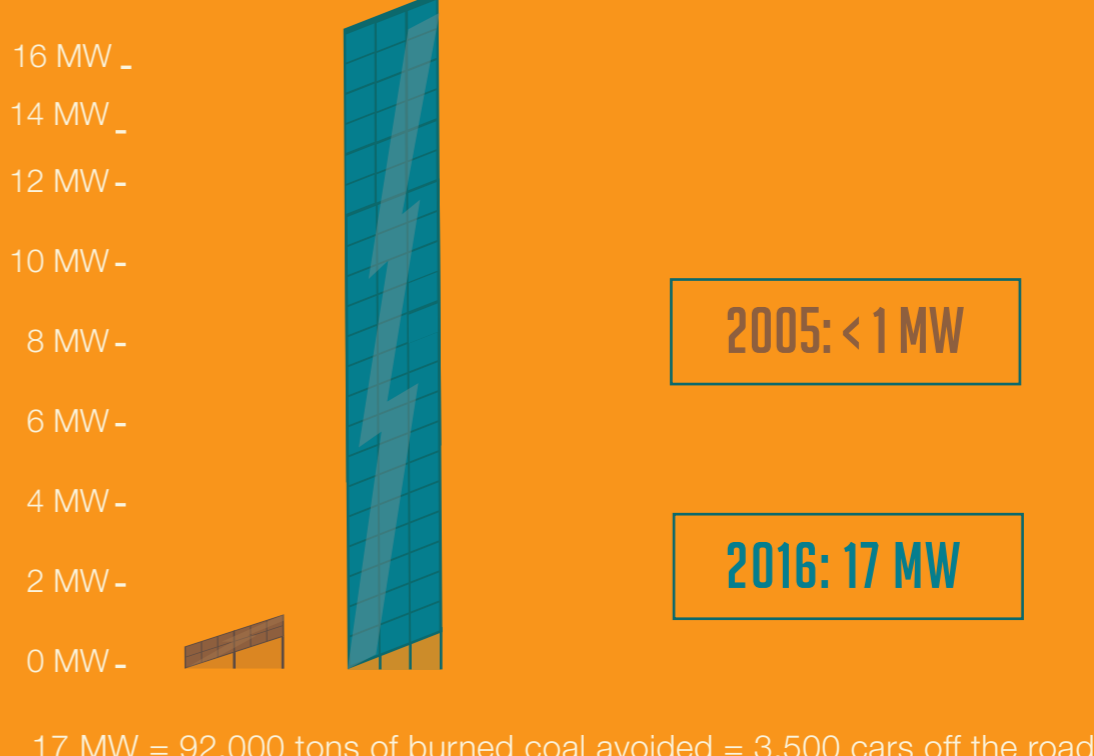
## WHO EMITS GHGs - EMISSIONS BY SECTOR



## OUR ELECTRICITY SUPPLY - COLORADO XCEL ENERGY RESOURCE MIX



## COMMUNITY INVESTMENTS IN SOLAR ENERGY



## EMISSIONS AND ECONOMICS

FROM 2005 TO 2016, BOULDER ADDED MORE THAN **7,500 JOBS** AND SAW A GROSS DOMESTIC PRODUCT INCREASE OF **\$7.8 BILLION** OR 49 PERCENT. EMISSIONS HAVE REDUCED 13% DURING THAT PERIOD.

WE STILL HAVE WORK TO DO! LEARN MORE AT [BOULDERCLIMATE.COM](http://BOULDERCLIMATE.COM)