



# PROJECT DRAWDOWN®

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SCIENCE HAS WARNED US



A view of Earth from space, showing the horizon and a bright light source, likely the sun, creating a lens flare effect. The text is overlaid on this image.

NOW, IT'S TIME FOR  
SOLUTIONS



**MANY COMPETING  
CLAIMS, AGENDAS**

Nuclear is **the** answer!

Grazing cattle can solve the climate problem!

No! It's solar!

Destroy capitalism!

Local food!

Use less plastic!

Carbon Capture!



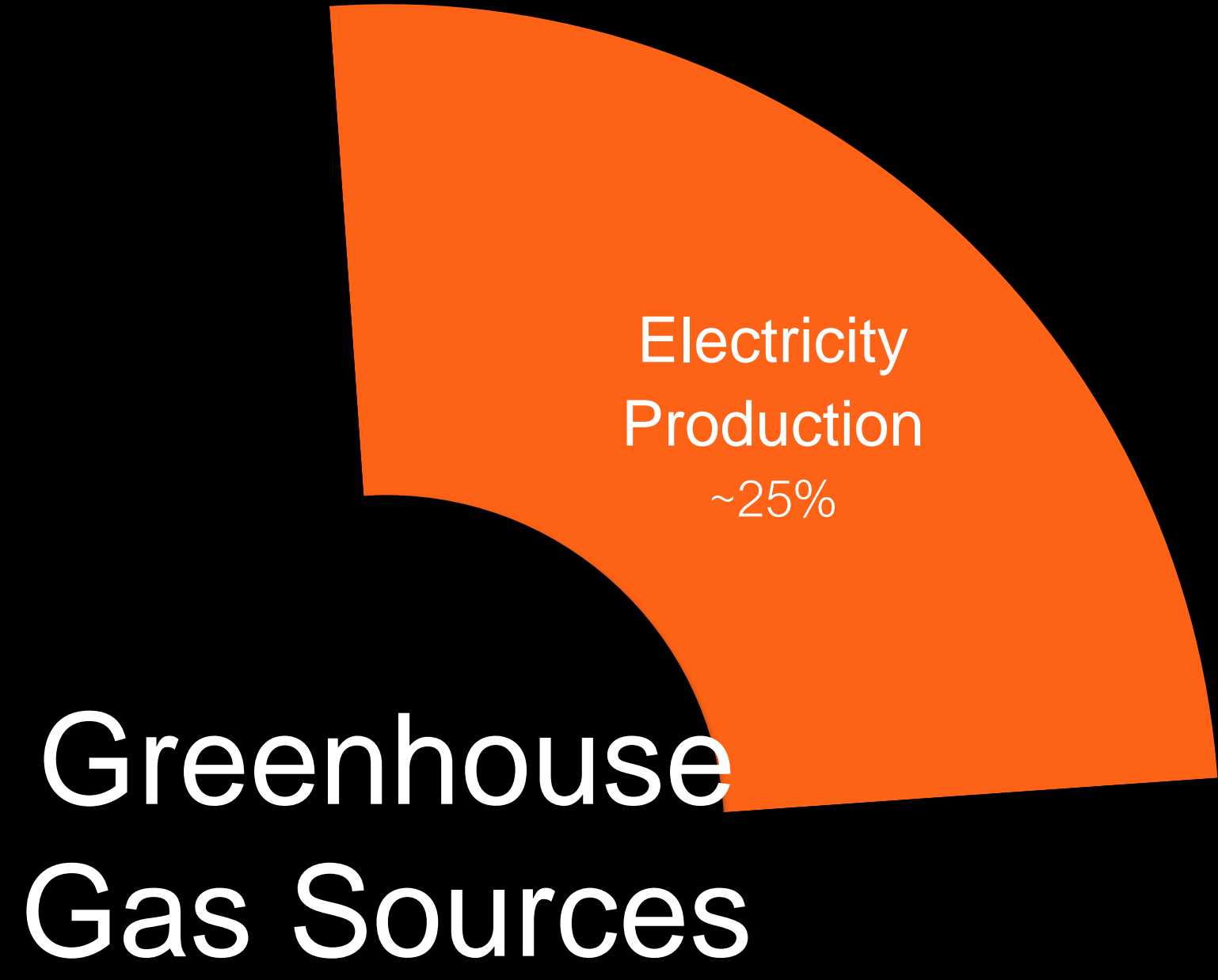
SCIENCE CAN GUIDE US

# **DRAWDOWN**

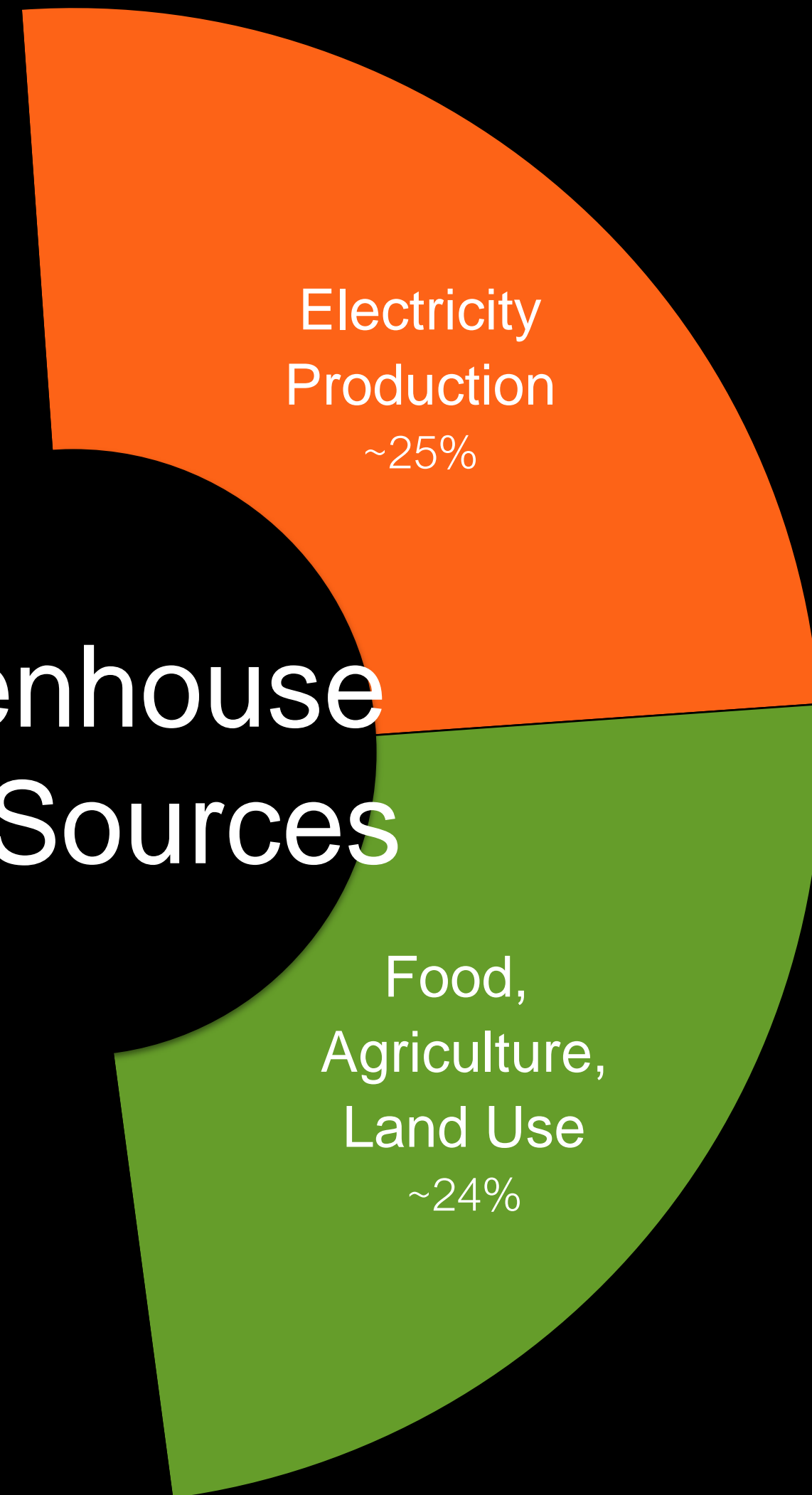
**THE MOST COMPREHENSIVE  
PLAN EVER PROPOSED TO  
REVERSE GLOBAL WARMING  
EDITED BY PAUL HAWKEN**

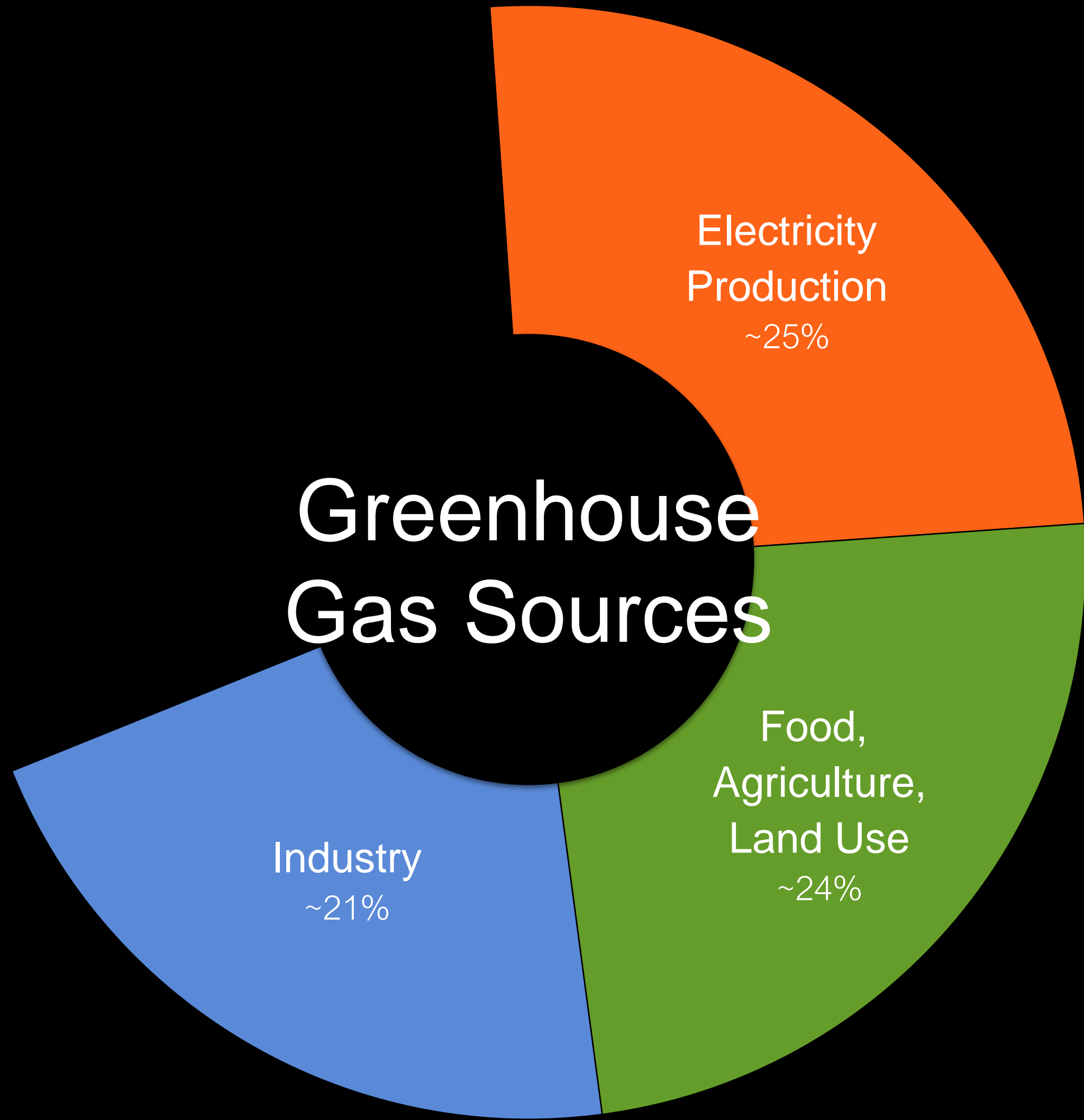


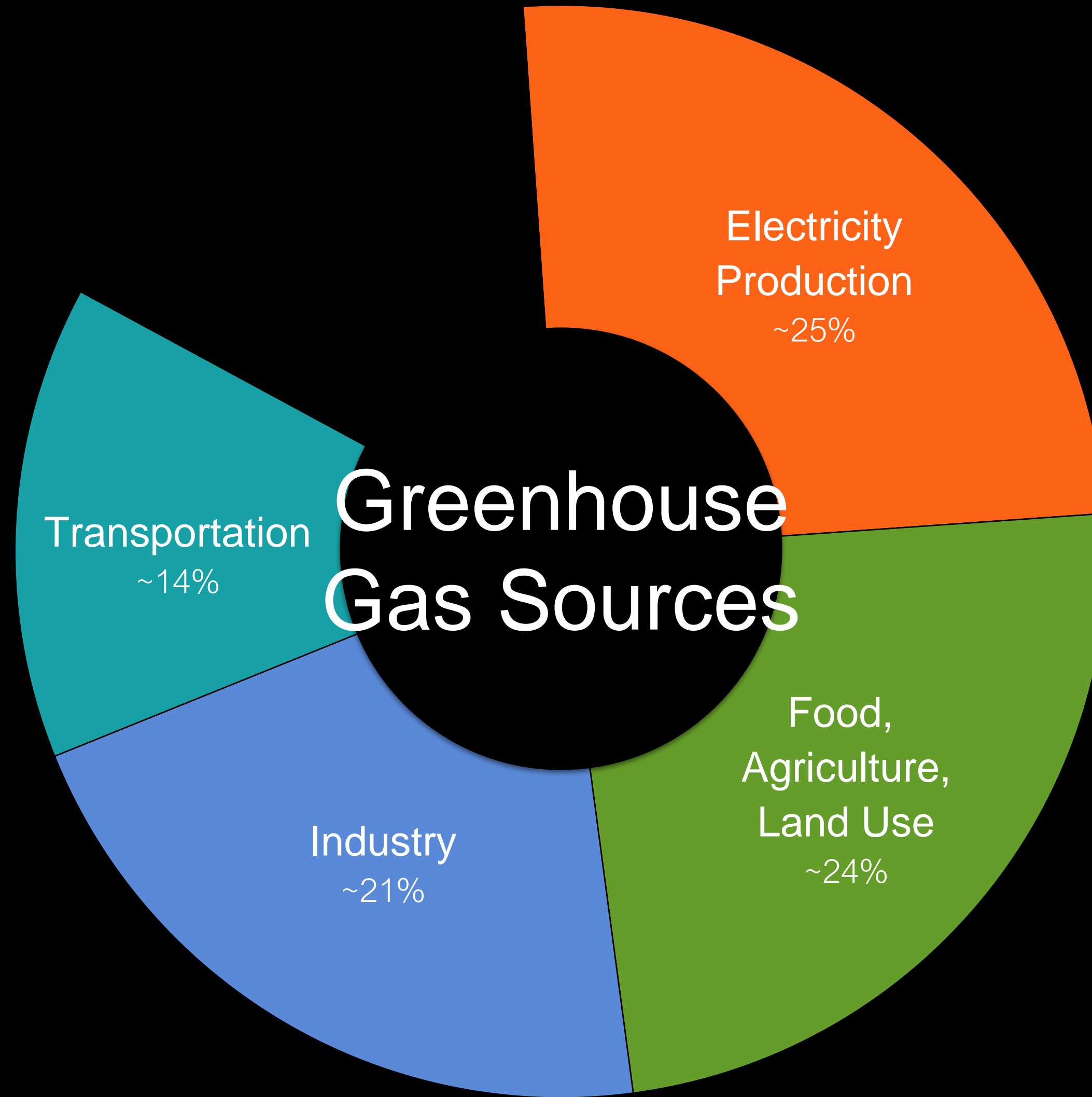


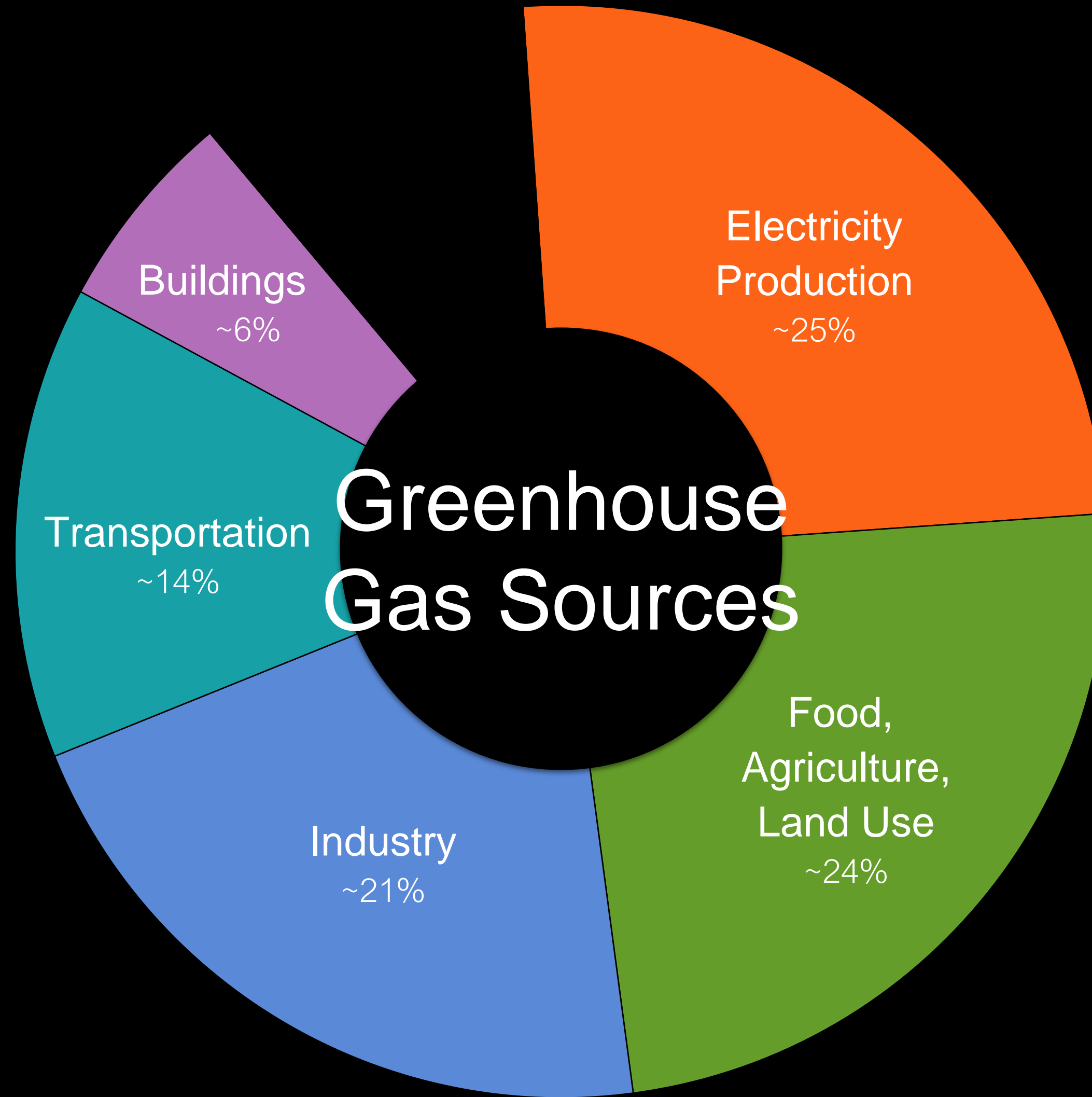


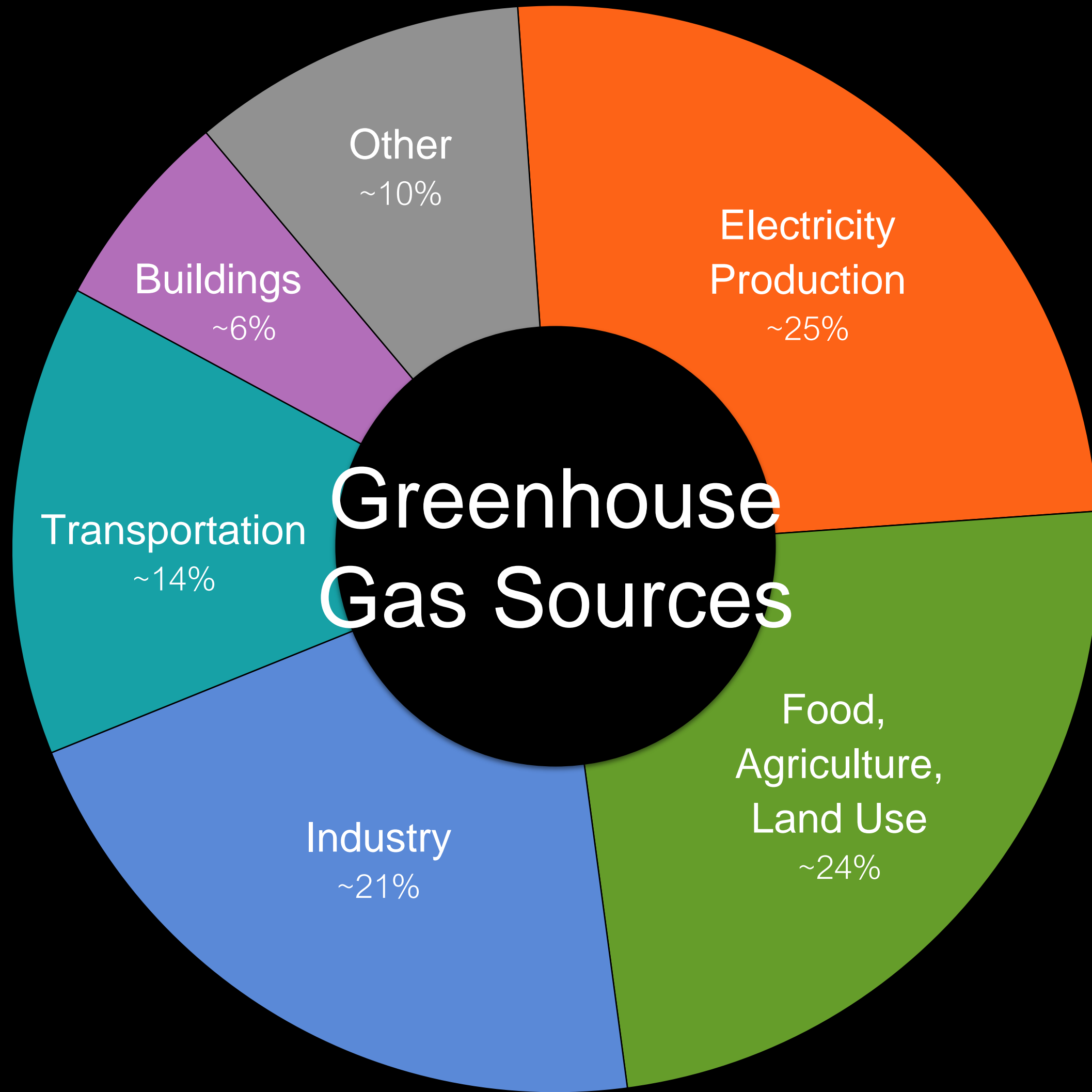
# Greenhouse Gas Sources











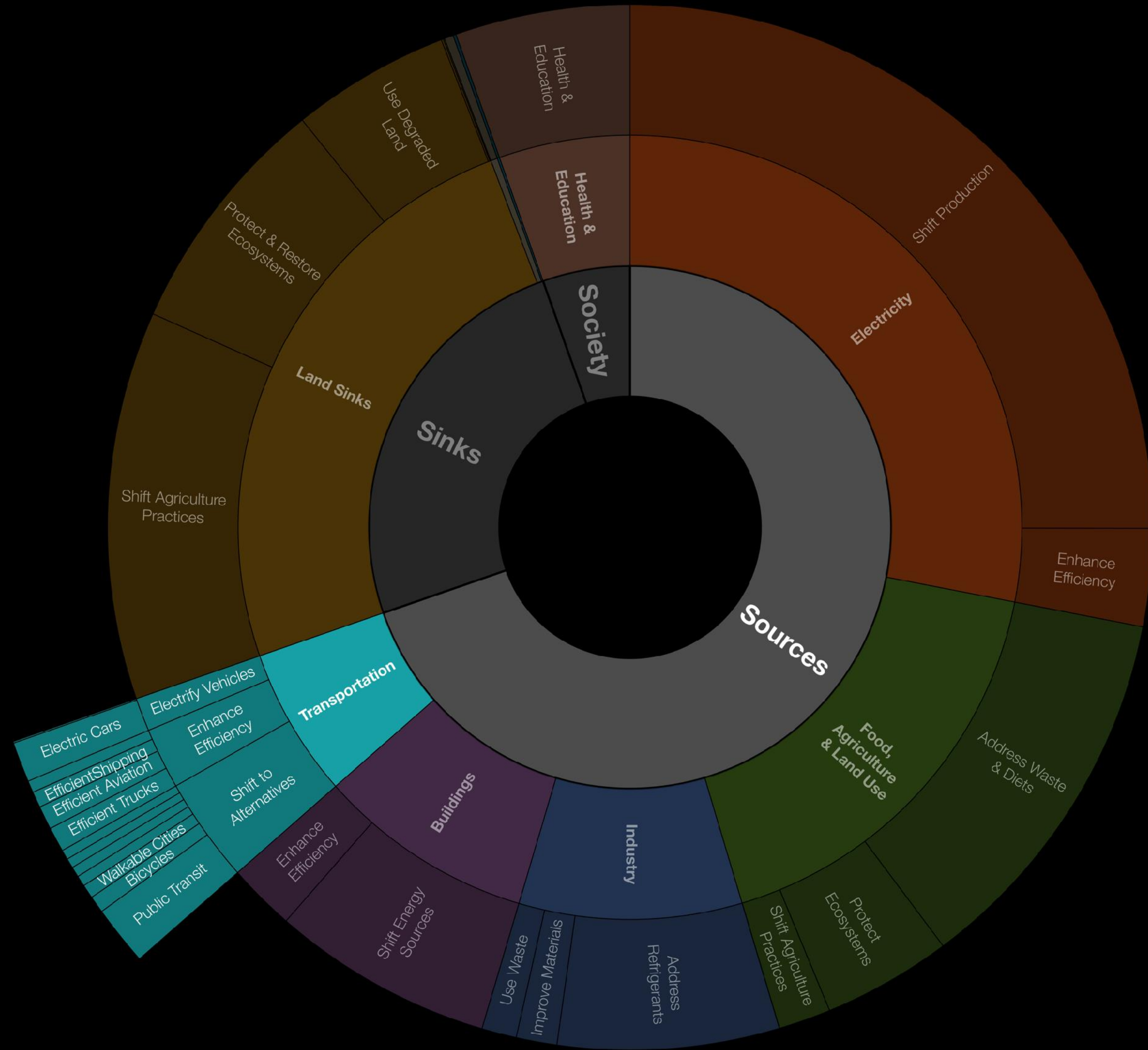














# ROOFTOP SOLAR

**#10**  
RANK BY 2050

**24.60 GT**  
REDUCED CO2

**\$453B**  
NET COST

**\$3.46T**  
NET SAVINGS



# REDUCED FOOD WASTE

#3

RANK BY 2050

70.53 GT

REDUCED CO2

# REFRIGERATION

#1  
RANK BY 2050

89.74 GT  
REDUCED CO2

TOO VARIABLE TO  
BE DETERMINED  
NET COST

-\$902B  
NET SAVINGS



# USE SCIENCE TO GUIDE SCALING OF SOLUTIONS



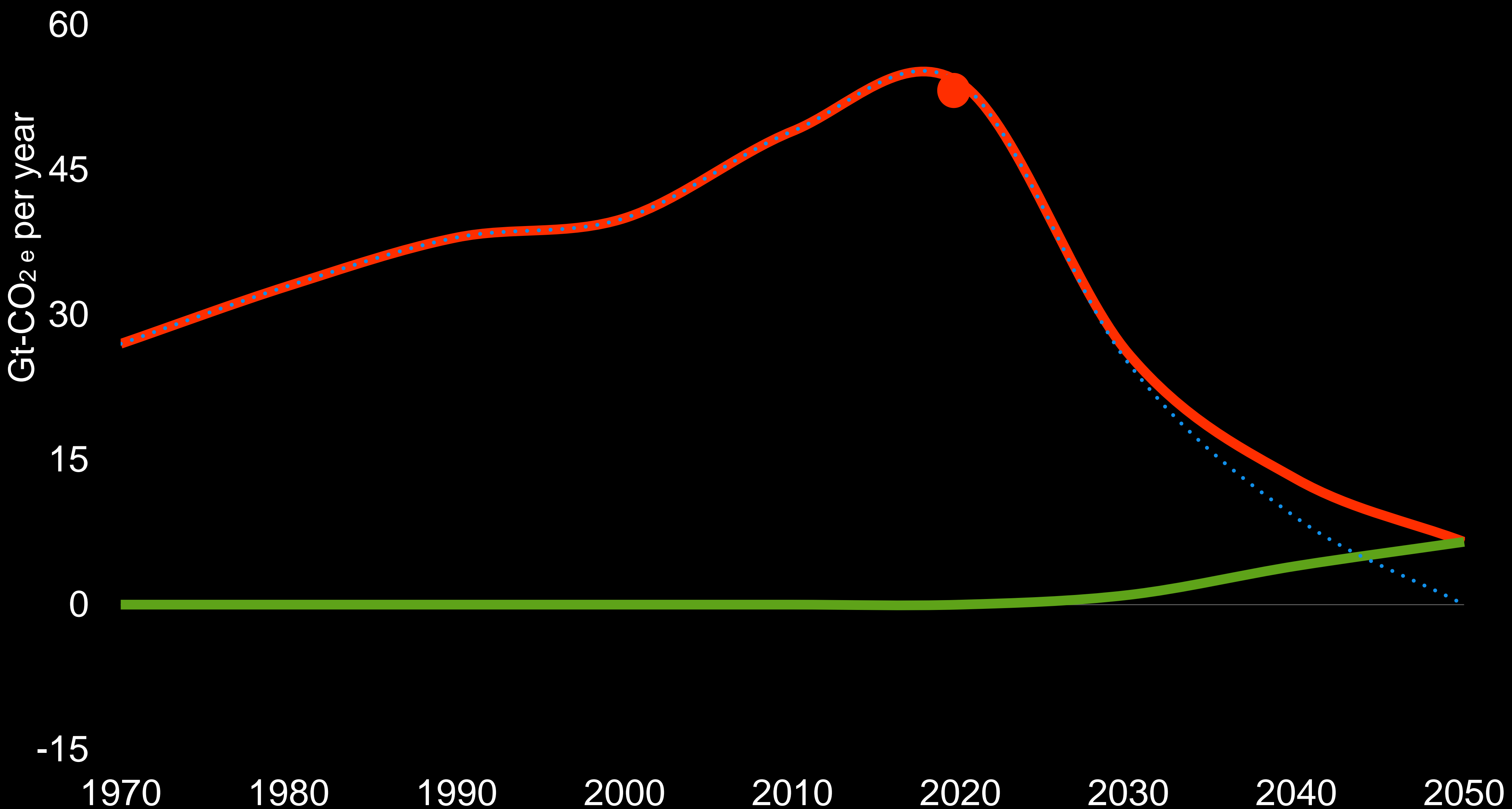
# TIME VALUE OF CARBON



■ GHG Emissions

■ Carbon Removal Projects

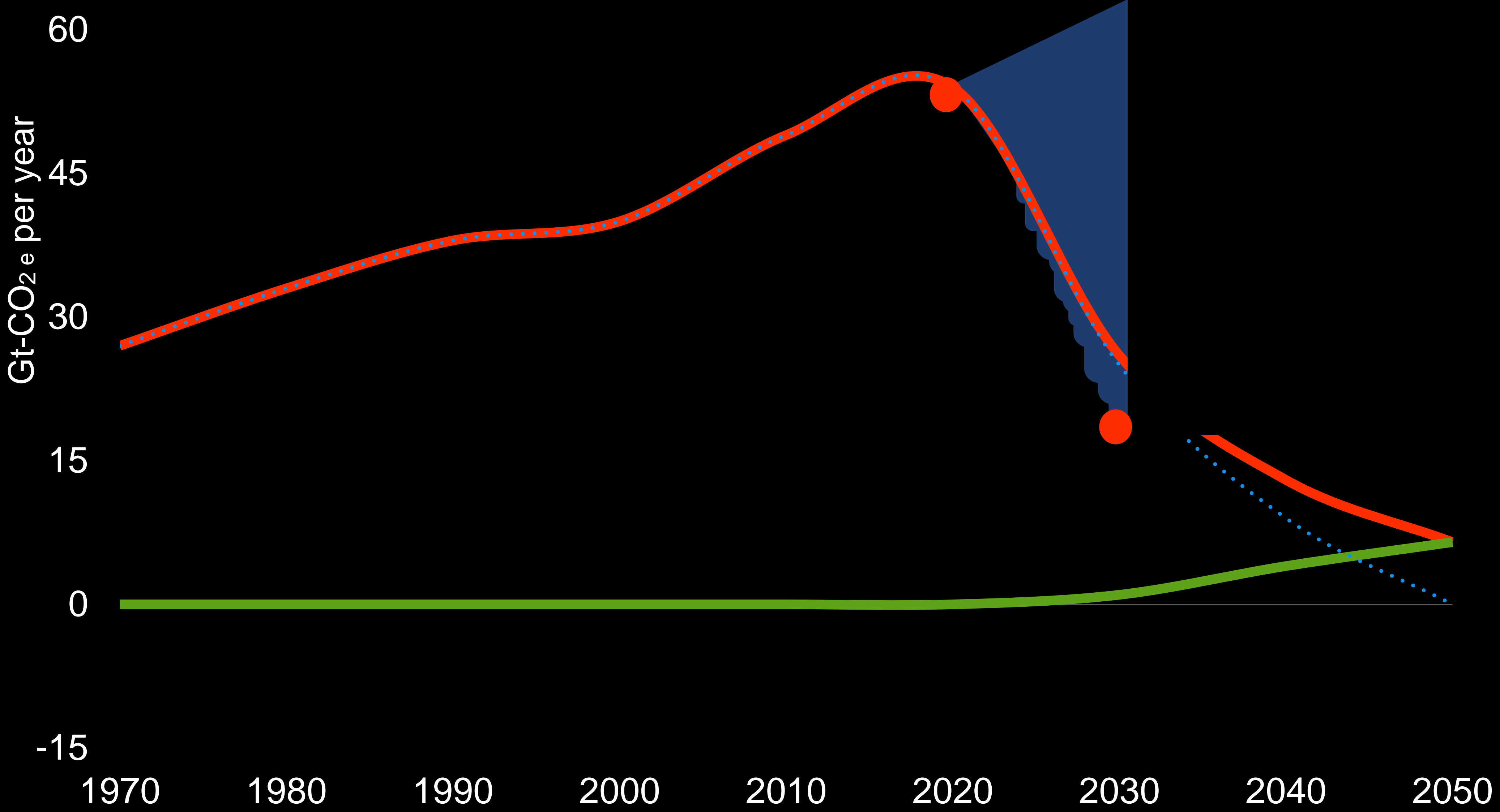
· Net GHG Emissions



■ GHG Emissions

■ Carbon Removal Projects

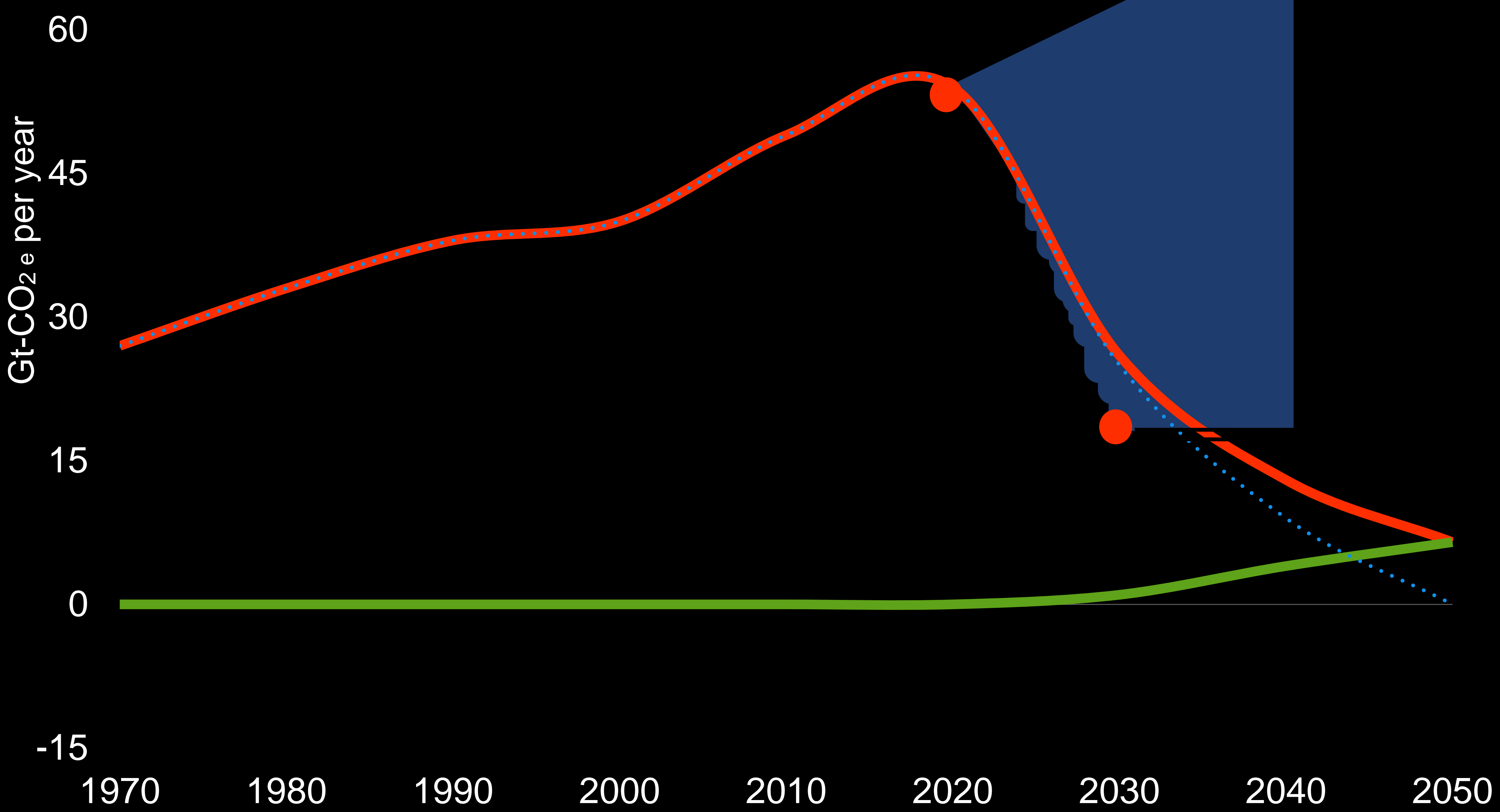
· Net GHG Emissions



■ GHG Emissions

■ Carbon Removal Projects

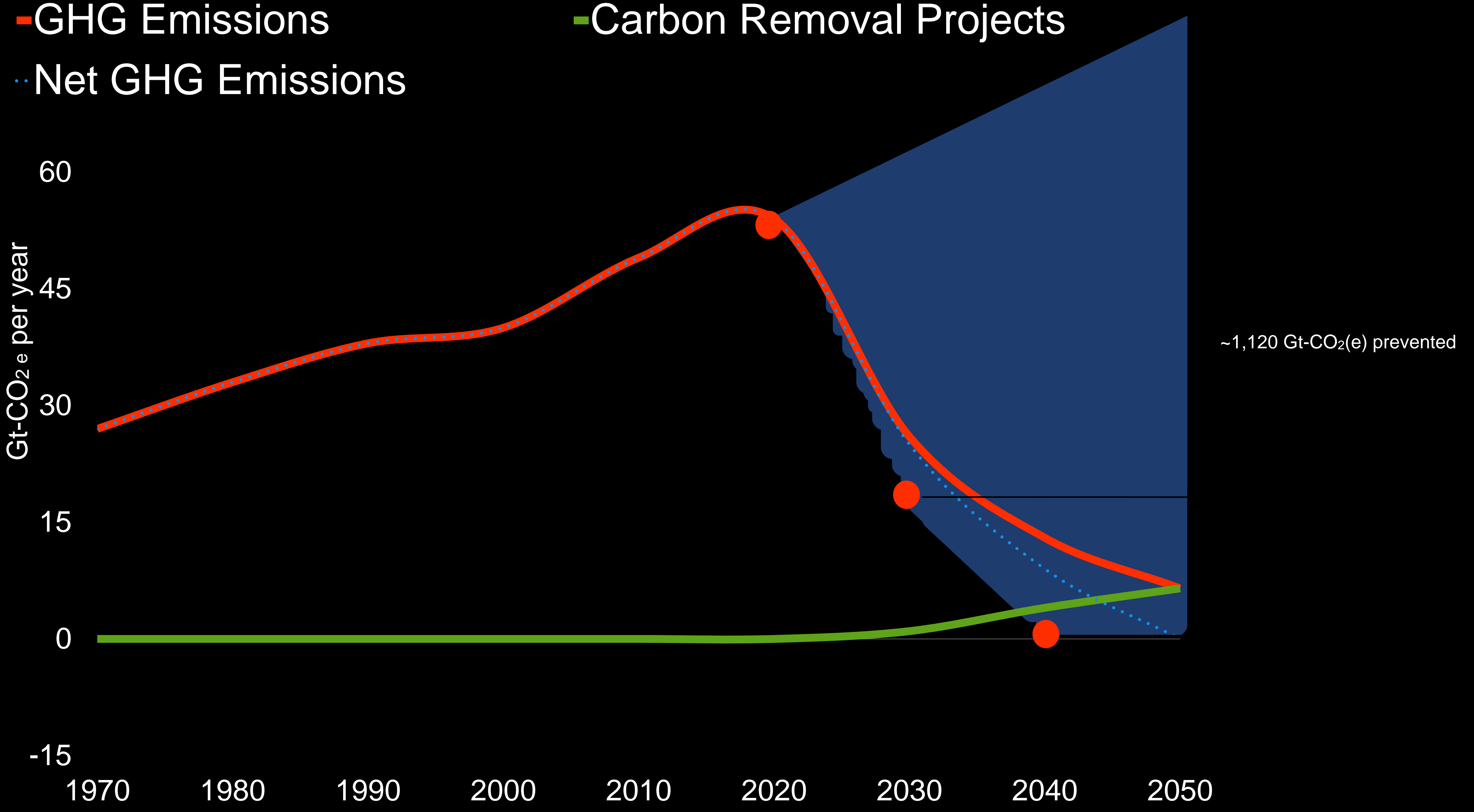
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■ GHG Emissions

■ Carbon Removal Projects

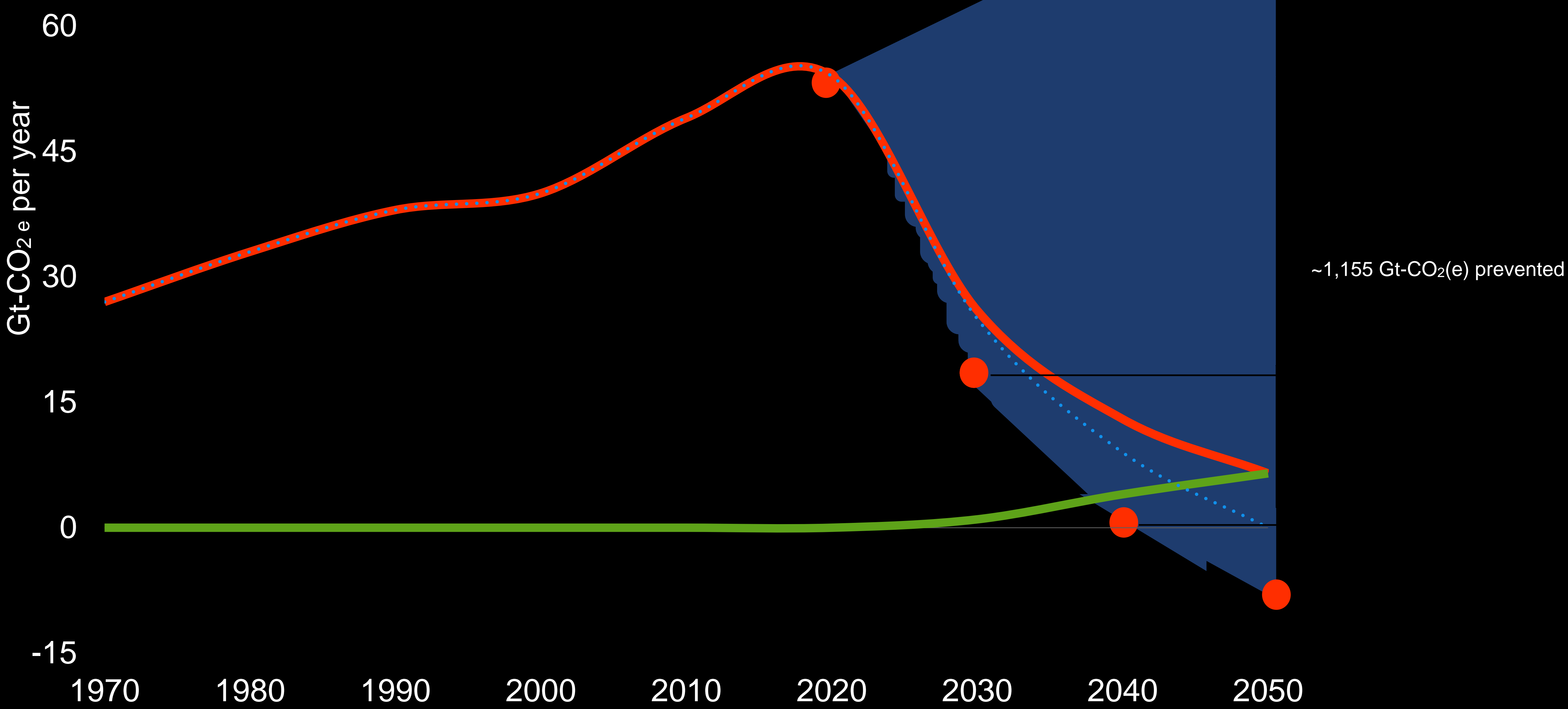
· Net GHG Emissions



■ GHG Emissions

■ Carbon Removal Projects

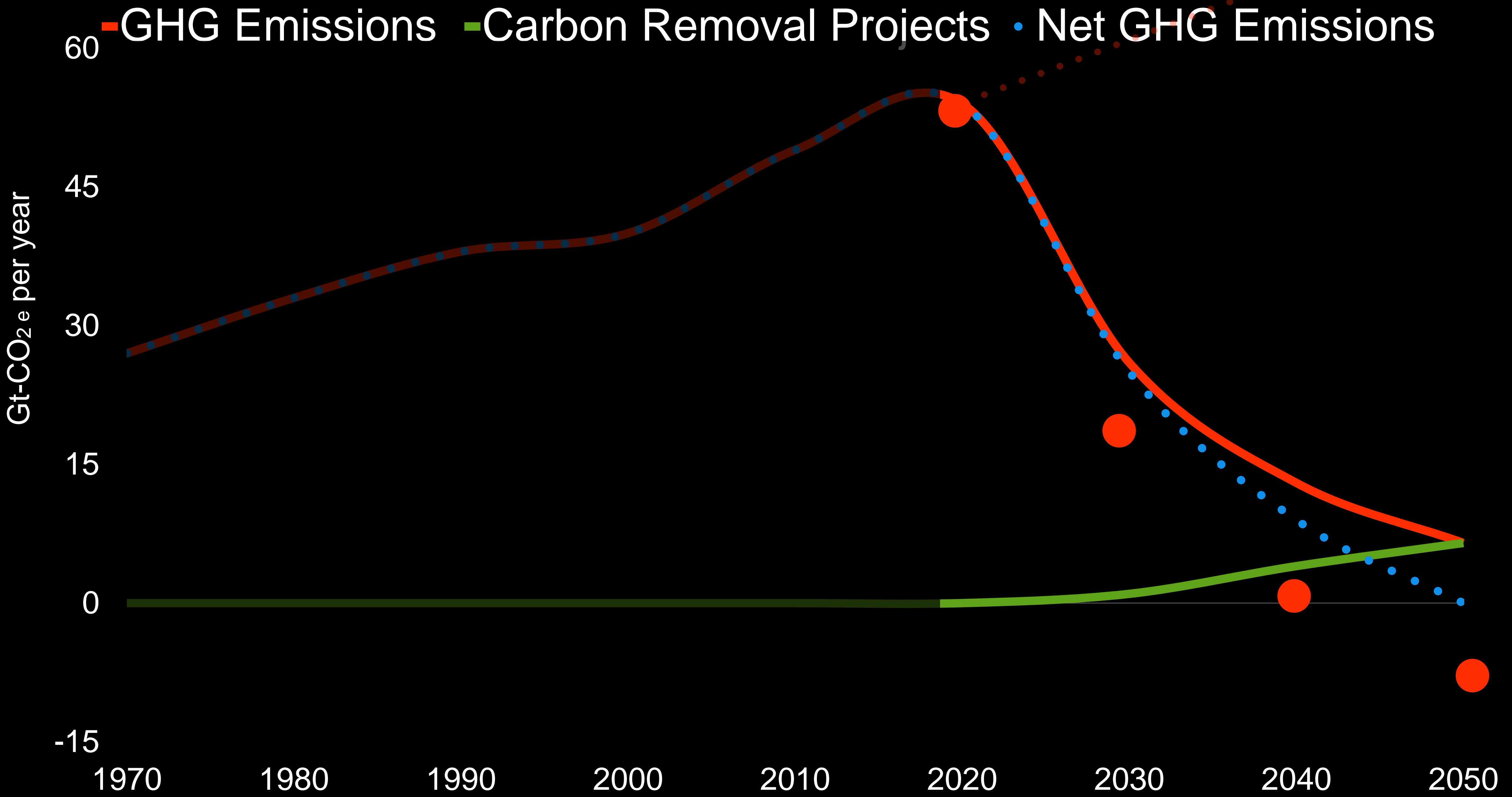
· Net GHG Emissions

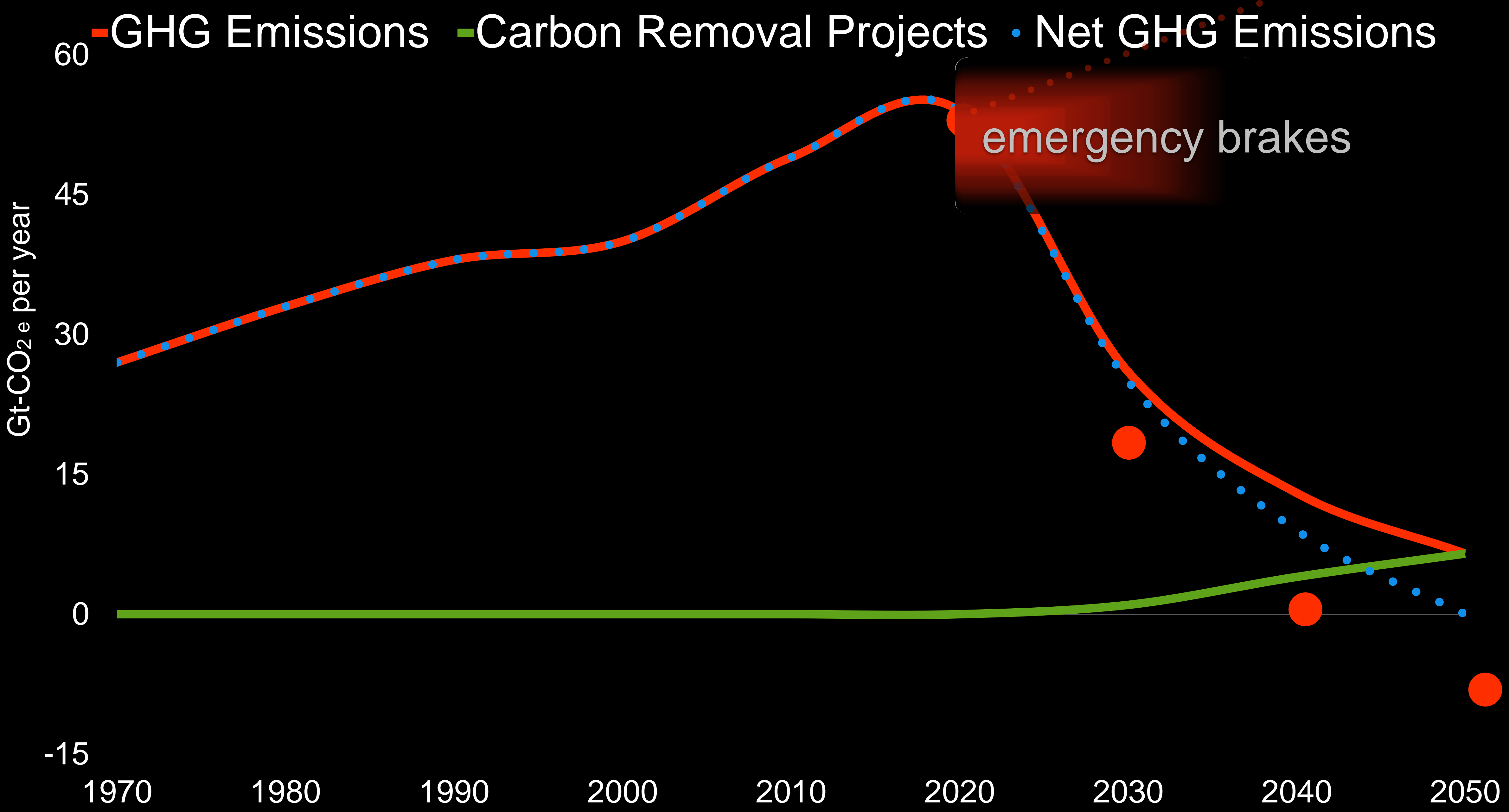


~1,155 Gt-CO<sub>2</sub>(e) prevented



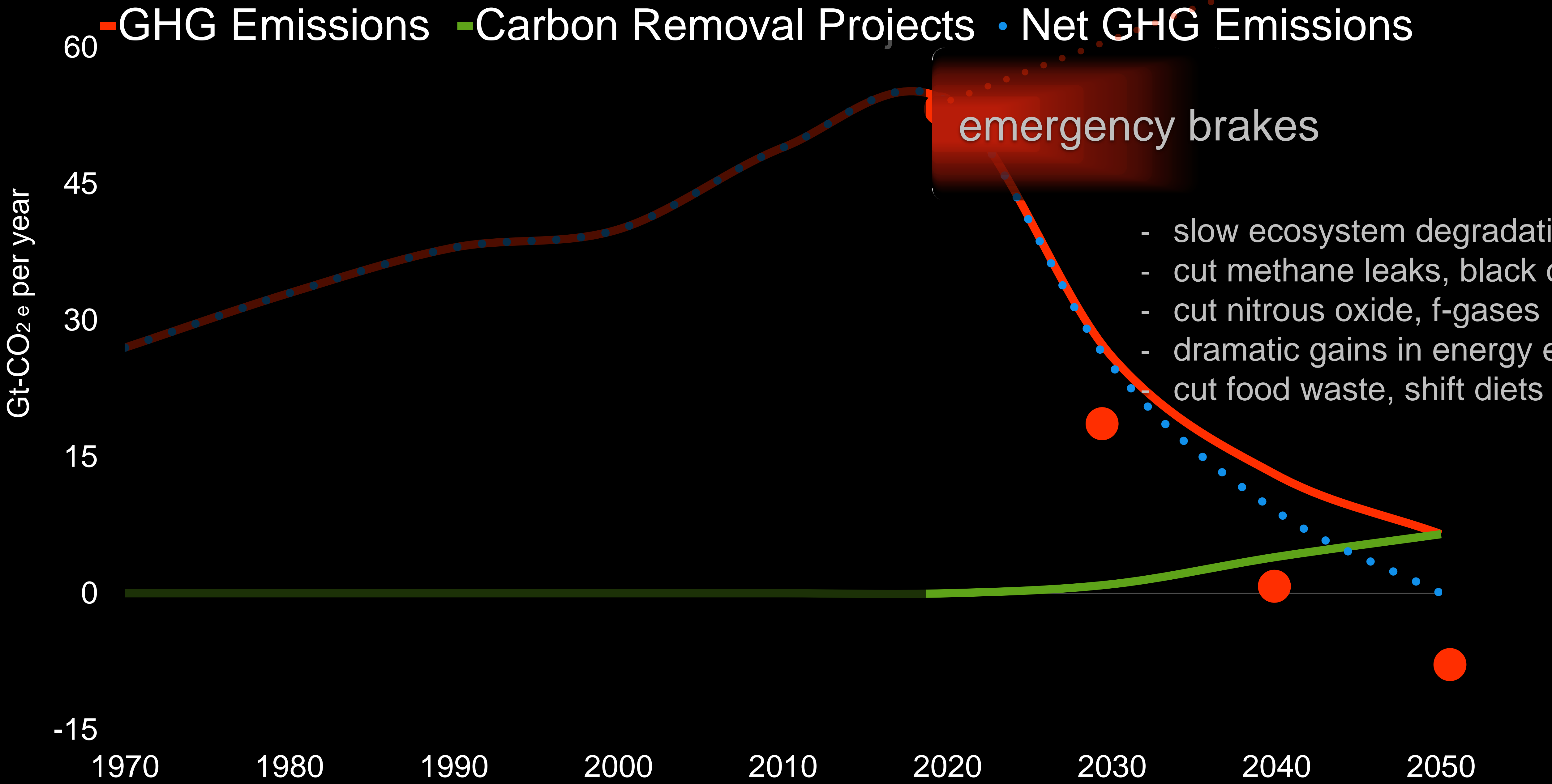
# ACTION ACROSS TIME

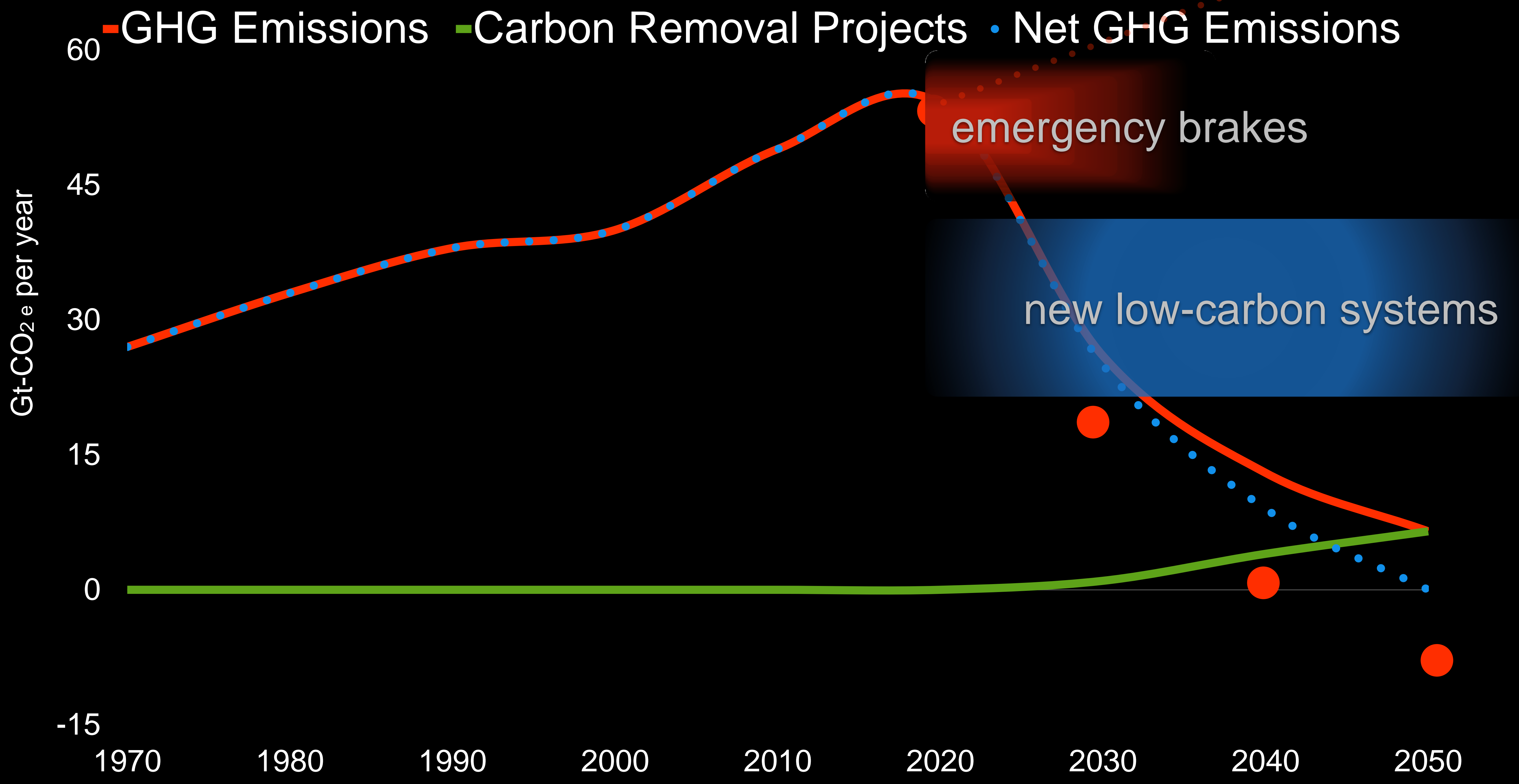




emergency brakes







GHG Emissions Carbon Removal Projects Net GHG Emissions

emergency brakes

new low-carbon systems

Gt-CO<sub>2</sub>e per year

60

45

30

15

0

-15

1970

1980

1990

2000

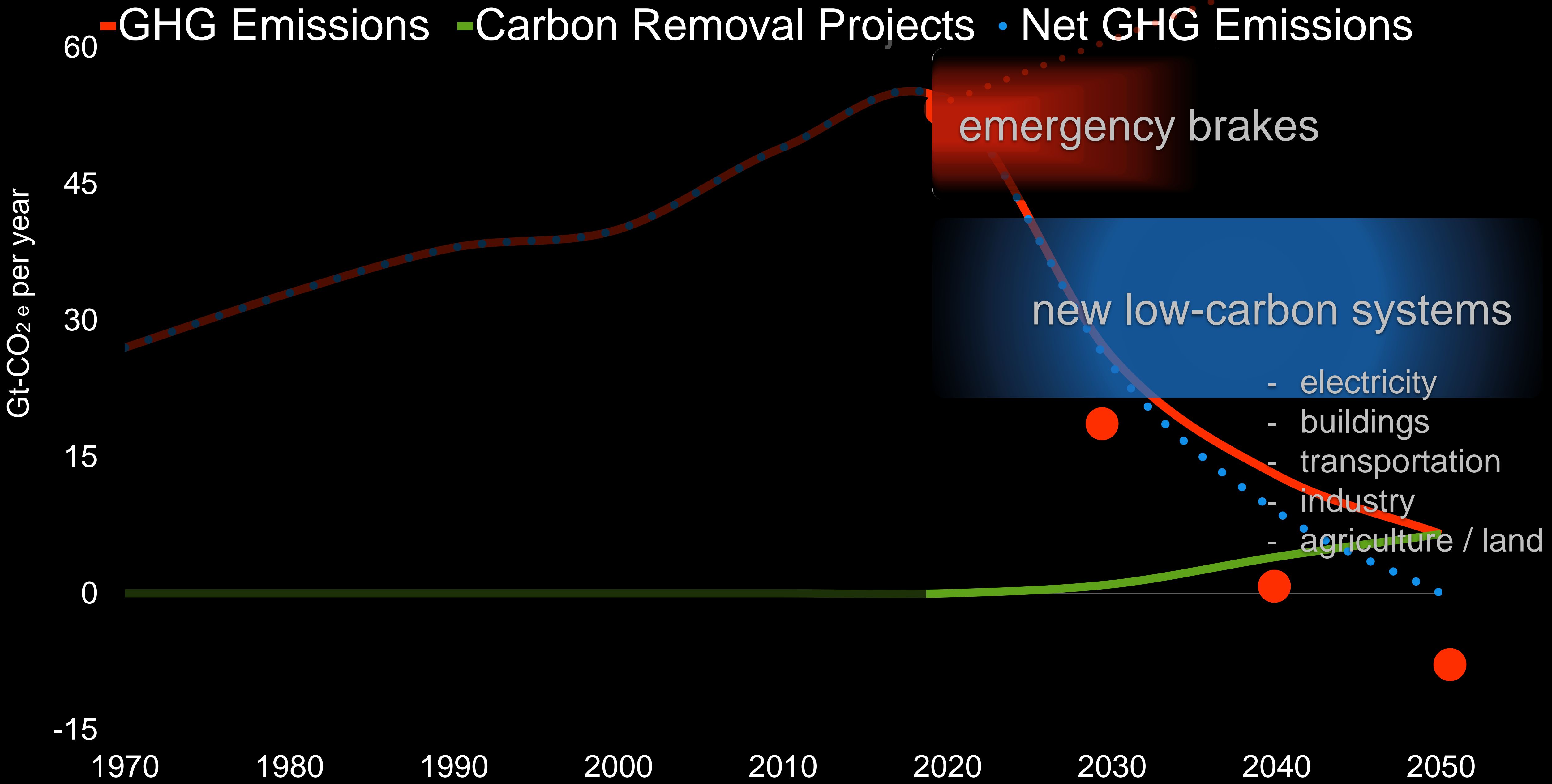
2010

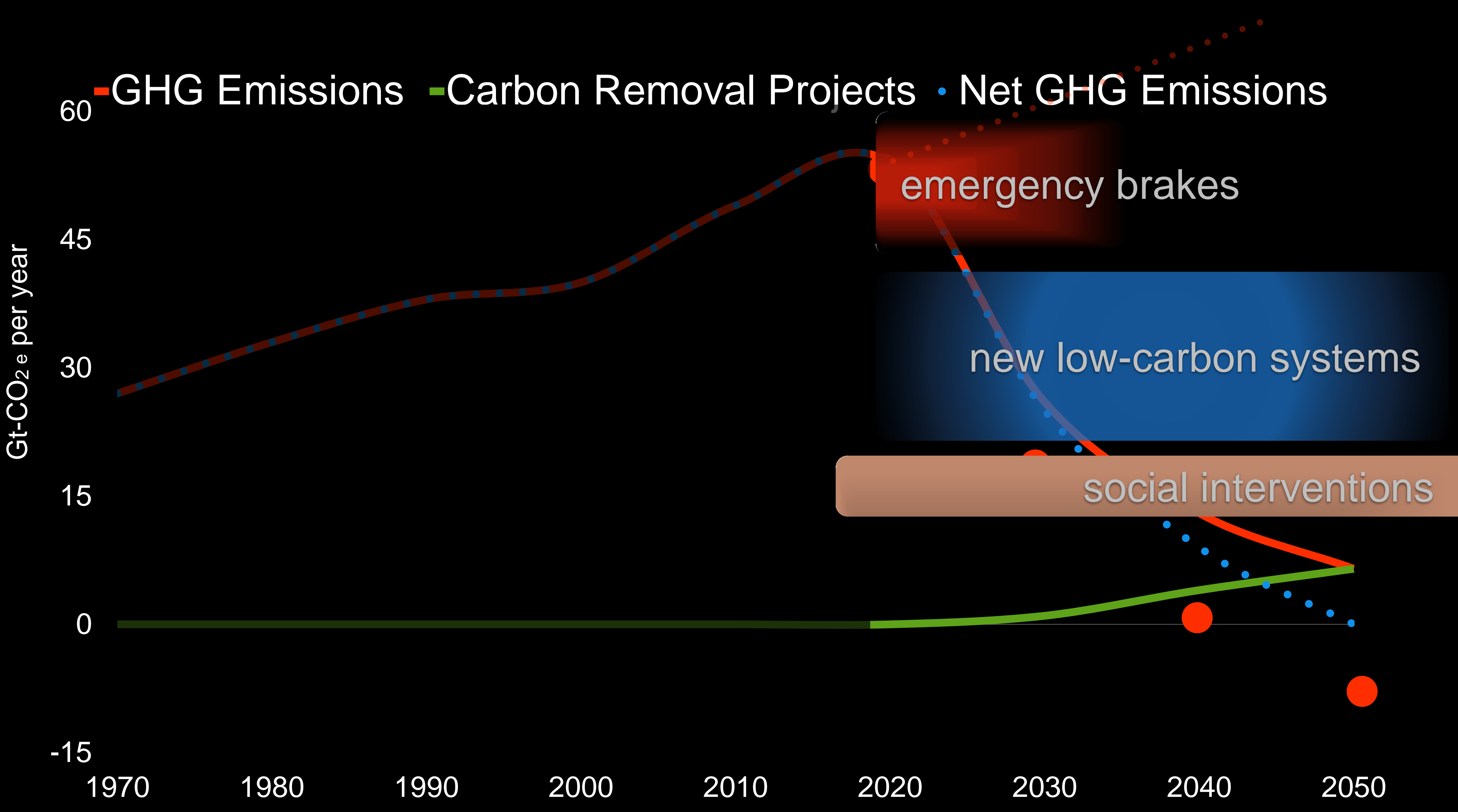
2020

2030

2040

2050





GHG Emissions

Carbon Removal Projects

Net GHG Emissions

Gt-CO<sub>2</sub>e per year

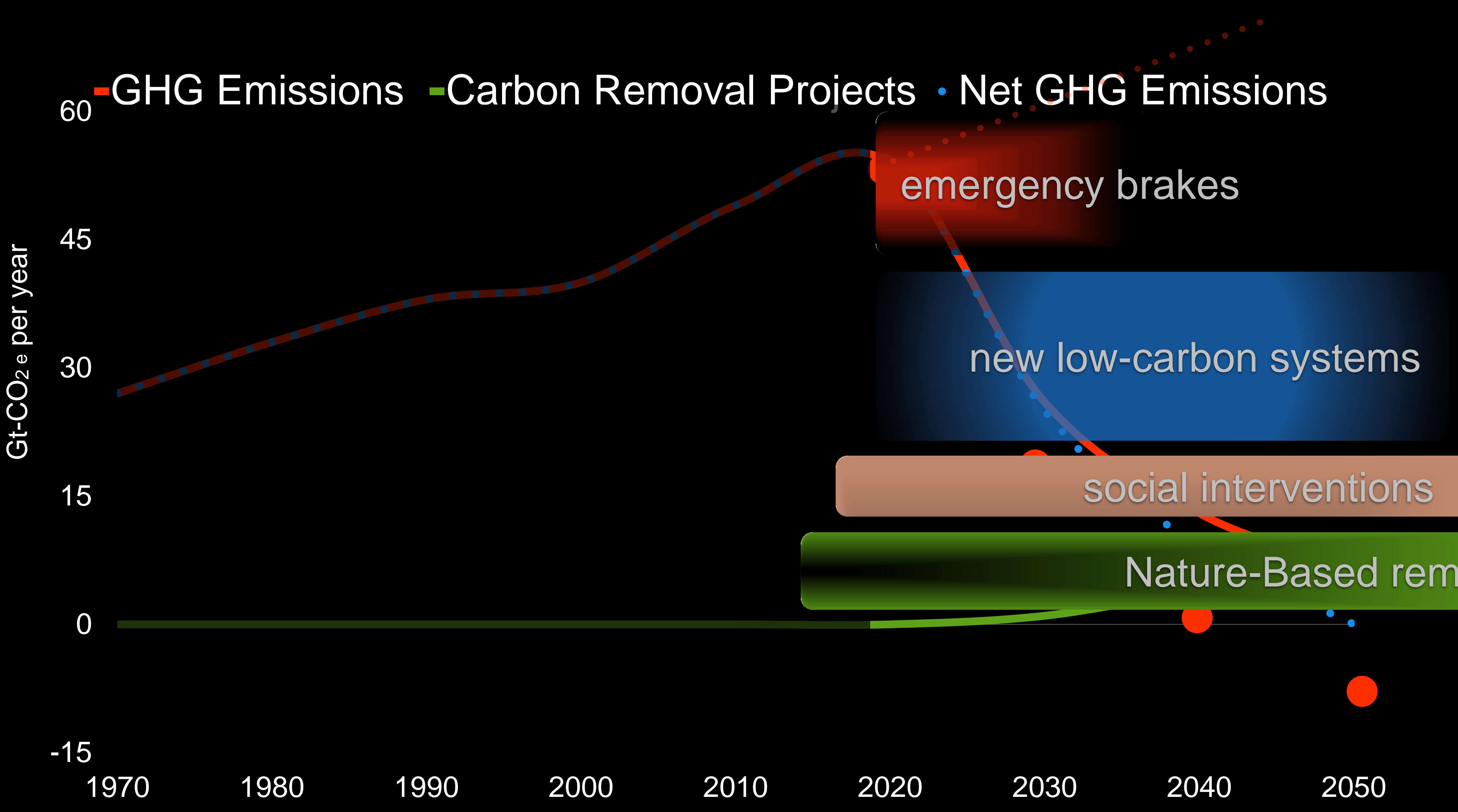
60  
45  
30  
15  
0  
-15

1970 1980 1990 2000 2010 2020 2030 2040 2050

emergency brakes

new low-carbon systems

social interventions



GHG Emissions

Carbon Removal Projects

Net GHG Emissions

Gt-CO<sub>2</sub>e per year

60  
45  
30  
15  
0  
-15

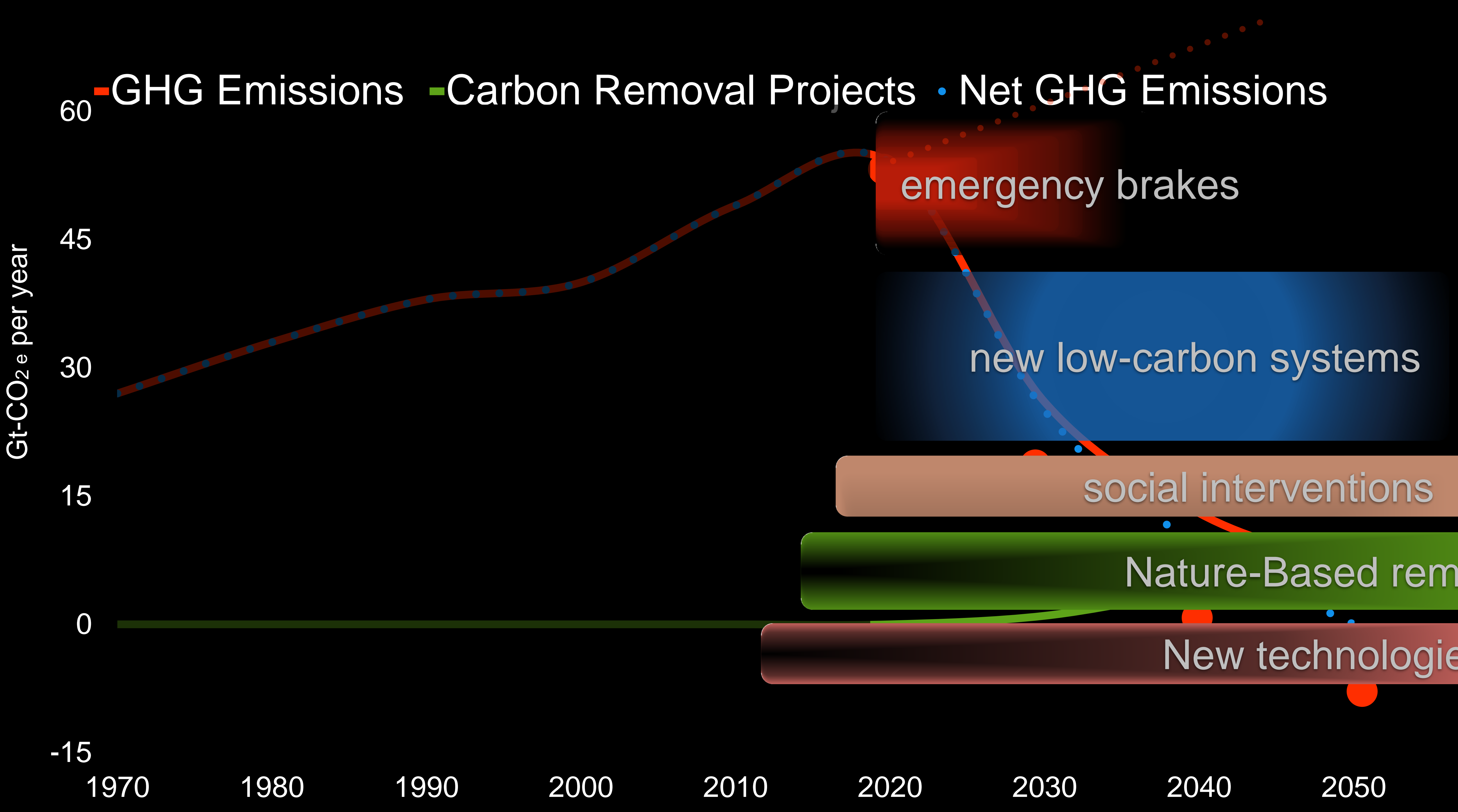
1970 1980 1990 2000 2010 2020 2030 2040 2050

emergency brakes

new low-carbon systems

social interventions

Nature-Based removal



GHG Emissions Carbon Removal Projects Net GHG Emissions

emergency brakes

new low-carbon systems

social interventions

Nature-Based removal

New technologies

Gt-CO<sub>2</sub>e per year

60  
45  
30  
15  
0  
-15

1970 1980 1990 2000 2010 2020 2030 2040 2050



# “WIN-WIN” SOLUTIONS FOR NATURE AND PEOPLE

### Adopting Clean Cooking

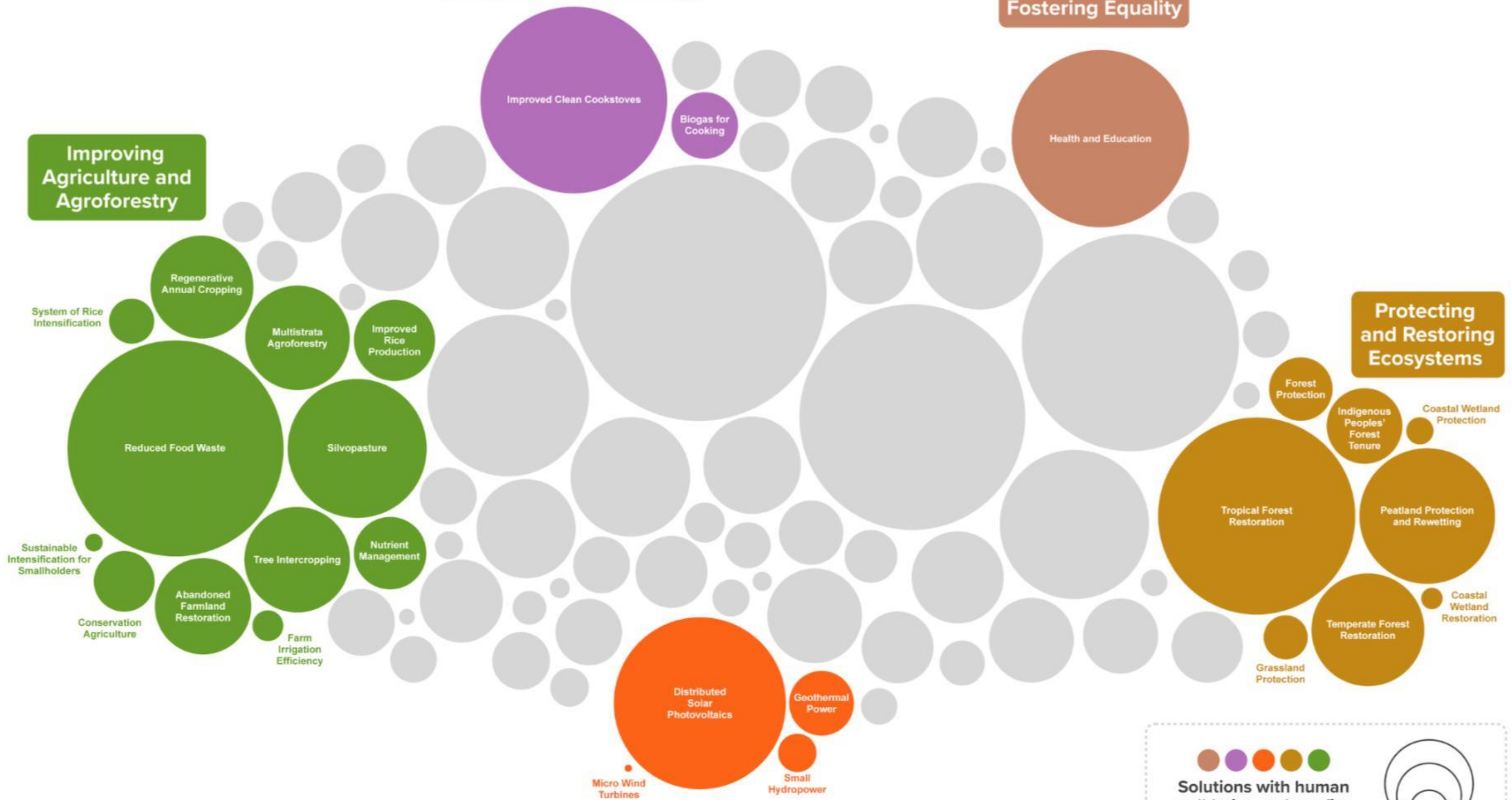
### Fostering Equality

### Improving Agriculture and Agroforestry

### Protecting and Restoring Ecosystems

### Providing Clean Electricity

+ Microgrids (unquantified)



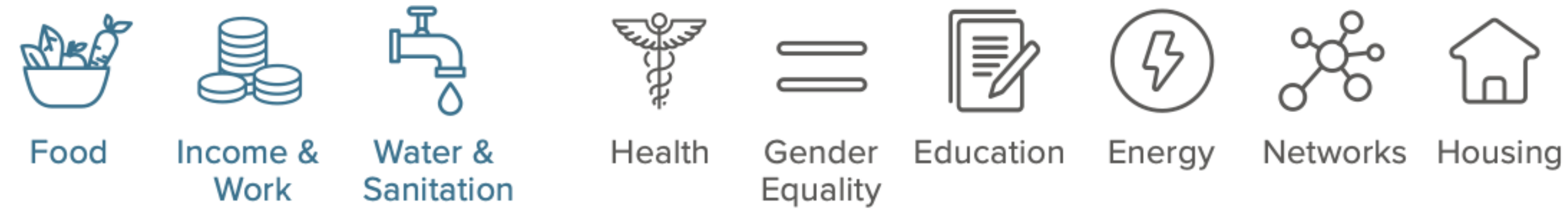
● ● ● ● ●  
**Solutions with human well-being co-benefits included in this report**

●  
**Other Project Drawdown solutions**

**Climate Impact**  
 CO<sub>2</sub>-eq (Gt) 2020–2050



IMPROVE AGRICULTURE & AGROFORESTRY



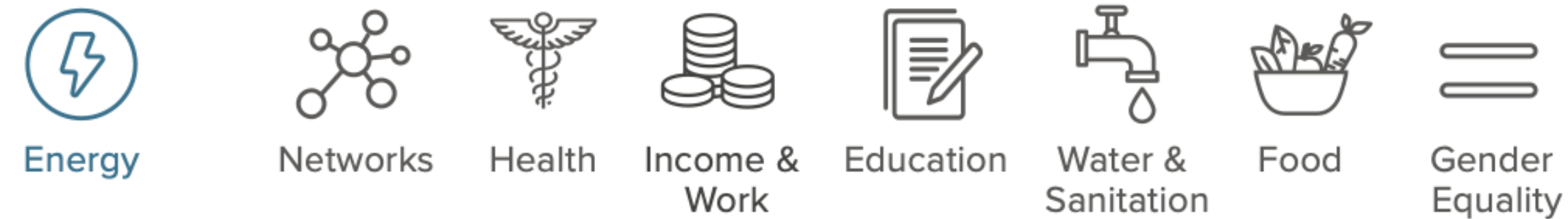
PROTECT & RESTORE ECOSYSTEMS



ADOPT CLEAN COOKING



PROVIDE CLEAN ELECTRICITY



FOSTER EQUALITY\*



# We're bringing climate solutions home.

Inspired by Project Drawdown®, we are building a movement in Georgia to accelerate progress toward net zero greenhouse gas emissions.

## What's Possible by 2030

If we get this right, we can cut Georgia's carbon impact by at least one-third in just 10 years, from 125 megatons (Mt) of carbon dioxide equivalent (CO<sub>2</sub>e) to 79 Mt. This is based on emissions reductions in five, high-impact areas:

↓ 009 Mt

A wide-angle photograph of the Duluth cityscape, showing a mix of historic and modern buildings along the waterfront. The foreground features a rocky shoreline and a body of water. The sky is blue with scattered white clouds.

# Duluth Citizens' Climate Action Plan

Policymaking  
grounded in science



A night sky with the Milky Way galaxy visible, silhouettes of evergreen trees in the foreground, and a dark background with stars.

**DRAWDOWN.ORG**

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