# **GLOBAL CLIMATE CHANGE**

# ARMED WITH THE FACTS

## WHAT IS IT?

Greenhouse gases—water vapor, carbon, methane, and nitrous oxide trap heat in our atmosphere. Those gases are neither "good" nor "bad." They are natural. Think of our atmosphere as a gorgeous crocheted blanket of gases, that lets in sunshine and light, and releases just enough heat to keep temperatures comfortable for human life. That's a climate in balance.

For more than a century, humans have been sending extra greenhouse gases into our atmosphere, from industrial and agricultural activities. We are tampering with the balance of gases in our atmosphere. It is now trapping too much of the sun's heat, so that our planet cannot properly cool off. We're throwing the regulation mechanisms out of whack.

This has created global warming. Our average temperatures are climbing steadily, and dangerously. This is such an enormous change that it is almost impossible to believe. But there is no disagreement among serious climate scientists. We are changing our climate. And we are beginning to see, feel—and suffer from—the results.

## HASN'T OUR CLIMATE ALWAYS CHANGED?

Sure. It has done so for hundreds of millions of years. But humans weren't around to experience those glacial freezes and epic melts. We couldn't have survived.

During our era, the Holocene era, humanity has enjoyed a fairly stable climate—and we have flourished because of that.

Climate scientists can measure the "fingerprint" of the carbon released by human activity that is contributing to warming.

## EXTREMELY DANGEROUS WEATHER

All of our weather is now affected by climate change because the environment is warmer and moister than it used to be. Global warming fuels more intense deluges from major storms, and rising seal levels make storm surges more destructive. Warming intensifies droughts and wildfires. Since 1980 weather disasters in North America have increased fivefold.

Munich Re, a reinsurance company, put it bluntly: "Nowhere in the world is the rising number of natural catastrophes more evident than in North America."

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# NOW IT'S PERSONAL

No one wins with climate change. It is devastating —

To children—and to everyone's health: heat waves are more frequent, more intense, and last longer, leading to stroke and respiratory problems. Children's lungs are more vulnerable to the smog that is caused by higher temperatures. Insect-borne illnesses are spreading, and asthma and allergy seasons are getting longer.

To farmers: Searing droughts of longer than normal duration are plaguing our Heartland.

To ranchers: More frequent, large scale wildfires are turning thousands of acres of pasture into infernos fueled by drier, warmer weather.

To homeowners: destruction of houses and gardens due to abnormally high winds, and flooding isn't just a coast issue—as folks in Vermont and Tennesse well know.

To city dwellers: massive power outages and destruction of infrastructure due to more severe and frequent storms. Floods that would normally occur once a century are now happening every 3 to 20 years.

To wildlife: many species cannot adapt fast enough to global warming; they are threatened with extinction.

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WHAT YOU CAN DO

There are dozens of things you can do to limit your own contribution to carbon pollution, from eating less meat to driving a more fuel-efficient car to keeping your house well-insulated. But this problem has to be attacked with large scale action.

### **BE AN ENGAGED CITIZEN**

There are times when being a good mom means getting involved. Tell the President, Congress, your mayor—and anyone else who will listen—that you are deeply concerned about climate change, and they should be too.

#### **BE DEMANDING**

Urge President Obama to use his leadership to convey the urgency of this global disaster Ask him to issue a Presidential Proclamation: make America the most energy efficient nation in the world by 2035.

### PROTECT THE CLEAN AIR ACT

Join our campaigns to demand that the Environmental Protection Agency reduce greenhouse gas emissions of carbon, soot, and methane from all major sources

#### SUPPORT RENEWABLES

Tell your power company—and your governor— you want more renewable energy sources like wind and sunshine in your electricity mix.

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