

# 50 BY 2050

## HYDROPOWER'S VISION FOR GROWTH

### FIGHTING CLIMATE CHANGE

Today, clean and renewable hydropower helps the nation avoid approximately 200 million metric tons of CO<sub>2</sub> each year. Hydropower is helping us fight climate change, but there is significant potential to do more. New analysis from the U.S. Department of Energy's Hydropower Vision Report found that by increasing hydropower's capacity by 50 gigawatts by 2050, we can **reduce greenhouse gas emissions by 5.6 billion metric tons.**

## GROWING HYDROPOWER BY 50 GW BY 2050 MEANS...

#### SIGNIFICANT ECONOMIC AND SOCIAL BENEFITS:

#### GHG

**\$209 billion savings** from avoided global damages from GHG emissions



#### AIR POLLUTION

**\$58 billion savings** in avoided mortality, morbidity, and economic damages from emissions reduction (SO<sub>2</sub>, NOx, and PM2.5)



#### WATER

**30 trillion gallons** of avoided water use



#### JOBS

**195,000 jobs supported**



#### A HEALTHIER AMERICA - REDUCTIONS IN:

Fewer cases of lower respiratory symptoms (age 7-14) **217,000**

Fewer cases of upper respiratory symptoms (asthmatics age 9-11) **323,000**

Fewer minor restricted-activity days (age 18-65) **8,203,000**

Fewer lost work days (age 18-65) **1,363,000**

Fewer cases of asthma exacerbation (age 6-18) **757,000**

Fewer cases of acute respiratory symptoms (ages 18-65) **4,965,000**

AS A NATION, WE HAVE A CLEAR CHOICE TO MAKE ABOUT OUR CLEAN ENERGY FUTURE:

## STAND STILL OR UNLOCK HYDROPOWER'S POTENTIAL



**1.75 GW**

New Stream-reach development



**6.3 GW**

Upgrades at existing hydropower projects



**4.8 GW**

Developing on existing non-powered dams



**35.5 GW**

New pumped storage projects, along with upgrades at existing facilities.