# Assured Guaranty Statement on Climate Change

As a global citizen, Assured Guaranty Ltd. (together with its subsidiaries, Assured Guaranty) recognizes that climate change is an area of growing concern. There is a clear consensus within the scientific community that climate change has caused, and will continue to cause, widespread impacts on human and natural systems.<sup>1</sup>

The most recent and comprehensive demonstration of the growing scientific consensus concerning the existence, causes and potential consequences of climate change can be found in the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) published on November 2, 2014 and available at <a href="https://www.ipcc.ch/report/ar5/syr/">https://www.ipcc.ch/report/ar5/syr/</a>. According to the IPCC, human activities have already caused 1.0°C of global warming above pre-industrial levels and:

Climate-related risks to health, livelihoods, food security, water supply, human security, and economic growth are projected to increase with global warming of 1.5°C and increase further with 2°C.<sup>2</sup>

Furthermore, according to the Fourth National Climate Assessment issued by the U.S. Global Change Research Program published in November 23, 2018 (available at <a href="https://nca2018.globalchange.gov/">https://nca2018.globalchange.gov/</a>):

Climate change creates new risks and exacerbates existing vulnerabilities in communities across the United States, presenting growing challenges to human health and safety, quality of life, and the rate of economic growth.<sup>3</sup>

The Fourth National Climate Assessment, as well as the previous Third National Climate Assessment<sup>4</sup> (published May 6, 2014 and available at <u>https://nca2014.globalchange.gov/report</u>) also issued by the U.S. Global Change Research Program, listed some of the potential long-term effects of global climate change in the United States, including:

- Temperatures will continue to rise
- Recent trend towards increased heavy precipitation events will continue
- More droughts and heat waves
- Hurricanes will become stronger and more intense
- Sea level rise of 1-4 feet by the year 2100

We believe that finding solutions to mitigate the effects of climate change is an important task that will require policies and collaboration between the public and private sector. Assured Guaranty, as a financial guaranty insurer, identifies, evaluates and assesses relevant risks, including climate change risks, and integrates appropriate risk management in its insurance business.

# Assured Guaranty's Carbon Footprint

Starting in 2020, we will measure, manage and report Greenhouse Gas emissions on an enterprise wide basis and set targets for emissions reductions. Going forward we will measure progress toward reducing our carbon footprint.

## Insurance Risk Management

Cities, counties, states and other issuers of municipal and infrastructure bonds are affected by severe weather events, which have become more frequent as global temperatures increased. The Fourth National Climate Assessment finds that:

More frequent and intense extreme weather and climate-related events, as well as changes in average climate conditions, are expected to continue to damage infrastructure, ecosystems, and social systems that provide essential benefits to communities.<sup>5</sup>

While the forecasts considered above serve as illustrations of the types of potential consequences of climate change, it is important to keep in mind the tremendous uncertainty underlying the forecasts. Nonetheless, we consider these risks in both our underwriting of new risks and our monitoring of existing risks in our insurance portfolio.

# Understanding Assured Guaranty's Underwriting Risk to Climate Change

Assured Guaranty provides financial guarantees for municipal and infrastructure debt obligations, with typical maturities of up to 30 years. Assured Guaranty is obligated to make timely payments of principal and interest to bondholders as the payments come due, over time, if the issuer or obligor fails to do so. The potential for obligor impairment due to climate change can arise in the short-term (< 10 years) from physical risk and in the longer-term (> 10 years) from transitional risk.

*Physical risk.* Assured Guaranty is familiar with the impacts of catastrophic natural events such as large hurricanes, severe flooding and wildfires on its portfolio. While we recognize that future weather events may be more extreme and frequent, our historical experience gives us a reasonable basis for assessing the future impact of physical risk on an obligor's ability to meet debt service payments.

*Transitional risk.* The long-term livability of areas may be impacted by the effects of climate change, such as higher sea levels, hotter weather, frequent and expansive wildfires and extreme droughts. Transitional risk is difficult to predict given uncertainty surrounding climate change timing and severity, potential initiatives being taken to mitigate impacts, and climate change's effect on demographics.

The expense municipalities will incur as they make required infrastructure changes to address physical and/or transitional climate risk, such as new sea walls, upgraded levees, new roads and strengthened bridge structures, will vary according to geographic location and the nature of the mitigation efforts needed. Likewise, allocation of the financial burden among federal, state and municipal governments also will vary. Assured Guaranty monitors developments related to climate change, as they relate to public finance, and incorporates them into its underwriting process.

## Underwriting Guidelines for New Exposures

We integrate environmental considerations into our credit underwriting process as described in our Environmental Policy.

## Surveillance of Existing Exposures

Consequences of global warming can also impact existing exposures. We consider the susceptibility of transactions that we have insured to climate change related impacts on an ongoing basis when we assign to these exposures, and regularly update, internal ratings.

Upon the occurrence of an extreme weather event, our Surveillance team reviews the impact of the event on the ability of issuers and projects located in affected regions to meet their debt service obligations. For example, in 2017 alone there were three major hurricanes, Harvey, Irma and Maria, that had devastating impacts on Texas, Florida, Puerto Rico and the Virgin Islands. In each of 2017 and 2018 there were several large wildfires across the state of California. Our Surveillance team reviewed the capacity for each of the insured exposures in these areas to meet their debt service obligations to determine if any internal rating downgrades or other remedial steps were warranted.

Beginning in 2020, we have broadened our environmental risk assessment in the surveillance process as described in our Environmental Policy.

## **Investment Risk Management**

## Assured Guaranty's Investment Portfolio

As described in our Environmental Policy, we have determined not to make new investments in thermal coal enterprises and our investment guidelines incorporate material ESG information into investment analysis.

## Assured Investment Management

Our asset management subsidiary, which we purchased in late 2019, takes into account relevant ESG information as part of its investment analysis and, depending on specific investor preferences, including those that are ESG-related, may restrict investments in certain sectors.

## **Climate Change Opportunities**

## Use of Municipal and Infrastructure Financings to Address Climate Related Risks

Even as climate change poses risk, increased knowledge and understanding of climate change may give rise to a number of opportunities for Assured Guaranty. We insure municipal debt that can be used by cities, counties and states to prepare for, and mitigate the impacts of, climate change-related events.

Existing infrastructure is typically designed to operate effectively based on historical events. Climate change is likely to lead to weather events that are more extreme than historical precedents, threatening highways, water treatment facilities and the power grid. In some parts of the United States including New York, Portland, Chicago and Southeast Florida, city and state planners are now required to plan for these more extreme events.<sup>6</sup> In 2018, 28 major US cities reported 240 climate resilience projects, totaling \$47 billion.<sup>7</sup> We believe that municipal bond insurance has an important role to play in helping cities, counties and states issue debt at more affordable rates to finance the massive infrastructure

improvements that may be required as climate change continues to create more extreme weather events.

In 2019 and 2020, Assured Guaranty issued financial guarantees covering bonds supported by a portfolio of photovoltaic solar plants located in southwest Spain, demonstrating our ability to assist renewable energy producers to achieve affordable debt issuances, in the U.S. and abroad.

February 2020

<sup>&</sup>lt;sup>1</sup> IPCC Climate Change 2014 Synthesis Report – Summary for Policymakers

<sup>&</sup>lt;sup>2</sup> IPCC Climate Change Global Warming of 1.5°C – Summary for Policymakers

<sup>&</sup>lt;sup>3</sup> USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018.

<sup>&</sup>lt;sup>4</sup> Melillo, Jerry M., Terese (T.C.) Richmond, and Gary W. Yohe, Eds., 2014: *Highlights of Climate Change Impacts in the United States: The Third National Climate Assessment*. U.S. Global Change Research Program, 148 pp.

<sup>&</sup>lt;sup>5</sup> IPCC Climate Change Global Warming of 1.5°C – Summary for Policymakers

<sup>&</sup>lt;sup>6</sup> Chester, Mikhail, et al. "How Cities Are Upgrading Infrastructure to Prepare for Climate Change." Smithsonian.com, Smithsonian Institution, 22 Oct. 2018, <u>www.smithsonianmag.com/innovation/how-cities-are-upgrading-infrastructure-prepare-climate-change-180970600/</u>.

<sup>&</sup>lt;sup>7</sup> Wertz, et al. "Cities' heightened focus on mitigating climate risk is credit positive." moodys.com, Moody's Investor Service, 17 Jan. 2019, <u>https://www.moodys.com/research/Local-government-US-Cities-heightened-focus-on-mitigating-climate-risk--PBM\_1153779</u>.