Emerging economies face US$1.7 trillion in economic damage if global temperatures rise three degrees by 2050.¹

**THE OPPORTUNITY**
Digital finance can help individuals, communities, businesses, and government combat and prepare for the damaging effects of climate change, particularly by building resilience and driving sustainable investments.

**CHALLENGES**

- The UN projects a 3–4°C increase in average global temperature by 2100 as a result of increasing CO₂ emissions, even with Paris pledges.²

- Since 2008, 25 million people have been displaced by weather-related events each year.⁴ Global economic losses from natural disasters now total $250–300 billion annually.⁵

- Southeast Asian countries, alone, face a $160 billion annual gap in green credit, which makes it harder for households and businesses to fund investments in sustainability.⁸

**SOLUTIONS**

- Digital payment platforms can be used to nudge consumers toward products with a lower carbon footprint, helping curb CO₂ emissions.³

- Access to digital savings, credit, and insurance services can help poor households mitigate the risk of climate-related disasters.⁶,⁷

- Digital finance enables households and businesses to make environmentally friendly investments, including those that reduce carbon emissions today and prepare for damaging effects of climate change in the future.⁹
“Take urgent action to combat climate change and its impacts.”

**CHINA** Users of Ant Financial’s digital finance platform have **prevented 150,000 tons of carbon emissions in just nine months** by monitoring the environmental friendliness of their potential purchases and adapting their purchase decisions accordingly.¹⁰

**UGANDA** A community savings group product using mobile wallets **helped over 300,000 small-scale depositors save $10 million** in just two years, boosting their resilience to financial shocks caused by climate change.¹³

**KENYA** Between 2008 and 2010, households that did not use mobile money experienced a 7% drop in use of goods and services when hit by a negative income shock (i.e., agricultural losses), whereas those that used mobile money did not experience a significant drop on average.¹⁴

**WORLDWIDE** Digital finance has catalyzed a new wave of green lending, with pay-as-you-go models helping finance over **2 million solar home systems** as of 2017.¹⁵

**THE PHILIPPINES** Mobile money and smart cards proved vital in distributing financial aid following Typhoon Haiyan in 2013.¹¹ Households with these savings accounts recovered faster after the typhoon.¹²

* These represent only a few of the many important challenges and solutions. They should not be read as an exhaustive list.

---

¹⁰ Oxfam, 2015
¹¹ UNISDR, 2015
¹² Suri & Jack, 2015
¹³ UNEPFI, 2017
¹⁴ IDMC, 2018
¹⁵ UNDP, 2015
¹⁶ Suri & Jack, 2015
¹⁷ UNEP & DBS, 2017
¹⁸ IPA, 2017
¹⁹ UNEPFI, 2017
²⁰ Harihara, Lamm, and Meissner, 2015
²¹ Hudner and Kurtz, 2015
²² Angelow & Mututta, 2016
²³ Suri & Jack, 2015
²⁴ Lighting Global & Dalberg, 2018