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## Doomsday Clock: Earth close to midnight

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USA TODAY

The world is closer to annihilation than it has ever been since the first nuclear bombs were released at the close of World War II, The Bulletin of the Atomic Scientists said Tuesday. The time on the Doomsday Clock moved forward from 100 seconds to midnight to 90 seconds to midnight.

It's a reset of what has come to be known as the Doomsday Clock, a decadeslong project of the Bulletin of the Atomic Scientists featuring a clock face where midnight represents Armageddon.

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Mary Robinson Former UN High Commissioner for Human Rights

Between Russia's nuclear brinkmanship in its war on Ukraine, the real threats of climate change becoming increasingly dire and ongoing concerns about more possible pandemics caused by humans encroaching on formerly wild areas, the Bulletin chose to set the clock to the closest midnight yet.

The world is facing a gathering storm of extinction-level consequences, exacerbated by the illegal invasion of Ukraine by Russia. This explains why the latest advance of the clock, said Mary Robinson, former president of Ireland and former United Nations High Commissioner for Human Rights.

"The threats are even more acute, and the failures of leadership even more damning. We live today in a world of interlocking crises, each illustrating the unwillingness of leaders to act in the true long-term interests of their people," she said.

The Bulletin was founded in 1945 by Albert Einstein and University of Chicago scientists who helped develop the first atomic weapons at the Manhattan Project. Two years later they launched the clock as a way to warn humanity just how close to nuclear apocalypse the world was.

"It's a way to remind people of issues that are so big they post a threat to civilization as a whole," said Steve Fetter, a professor of public policy at the University of Maryland and member of the Bulletin's Science and Security Board, which sets the clock each year.

The clock has ticked minutes or seconds toward or away from catastrophe over the years. Wars bring it closer, treaties and cooperation further away.

For the past two years, it has been at 100 seconds to midnight.



#### Nuclear risks from Russia's war on Ukraine

The clock ticked forward largely, though not exclusively, because of the nuclear dangers posed by the war in Ukraine, the Bulletin said in its statement.

The war has eroded norms of international conduct.

"Russia's thinly veiled threats to use nuclear weapons remind the world that escalation of the conflict – by accident, intention, or miscalculation – is a terrible risk. The possibility that the conflict could spin out of anyone's control remains high," the statement read.

Ukrainian servicemen fire a self-propelled howitzer towards Russian positions in 2022. AFP VIA GETTY IMAGES

# Why did the Doomsday Clock tick forward to 90 seconds to midnight?

The movement of the clock to just 90 seconds to midnight sends a message that the world's situation is urgent, with possible broad consequences and long-standing effects, said the Bulletin's president, Rachel Bronson.

"What we're conveying with this clock move is things are not going in the right direction, and they haven't been going in the right direction. Those who are listening say 'The world doesn't feel safer today,' – they're not alone." she said.

Their hope is that this year's announcement will focus on world awareness and push people toward action and away from a business-as-usual mindset. Scientists are unequivocal, said Robinson.

"Leaders, wake up! This is your responsibility. This is on your watch," she said.

### Who sets the Doomsday Clock?

The Bulletin of the Atomic Scientists for decades has regularly published a new Doomsday Clock setting, showing just how close – or far – its experts believe humanity is from the brink.

The clock "conveys how close we are to destroying our civilization with dangerous technologies of our own making," according to the group.



Muhsin Scott sits under evaporative coolers as temperatures exceed 105 degrees in 2021 at Andre House, which offers services for the homeless in Phoenix, Ariz. DAVID WALLACE/USA

TODAY NETWORK

### Climate change is also a concern

"These years leading up to 2030, from a climate and biodiversity perspective, are probably the most important years in human history because either we will do what the scientists are telling us to do or we will condemn future generations to a terrible world," said Robinson.

Russia's invasion of Ukraine and the strains that it put on European energy has resulted in increased use of greenhouse gas-producing coal and oil.

The good news is that there's been a tremendous expansion in innovation around renewable energy and the coming generation is deeply engaged in the issue, said Sivan Kartha, a senior scientist at the Stockholm Environmental Institute and a member of the Bulletin's Science and Security Board.

"The generation that's growing up now, the generation that will be our leaders in the future, is fired up about climate change," he said.

"Our generation has been talking about climate change as a problem for future generations. This is the future generation that's coming up now, and that will see the potential very dire impacts. And so their motivation, their energy and their seriousness about climate change is (different) in a way the former generations hasn't been."