

China pushes to digitize mines in attempt to make them safer

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A mine worker looks on near the mining face of Xiaobaodang Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Wednesday, April 26, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan

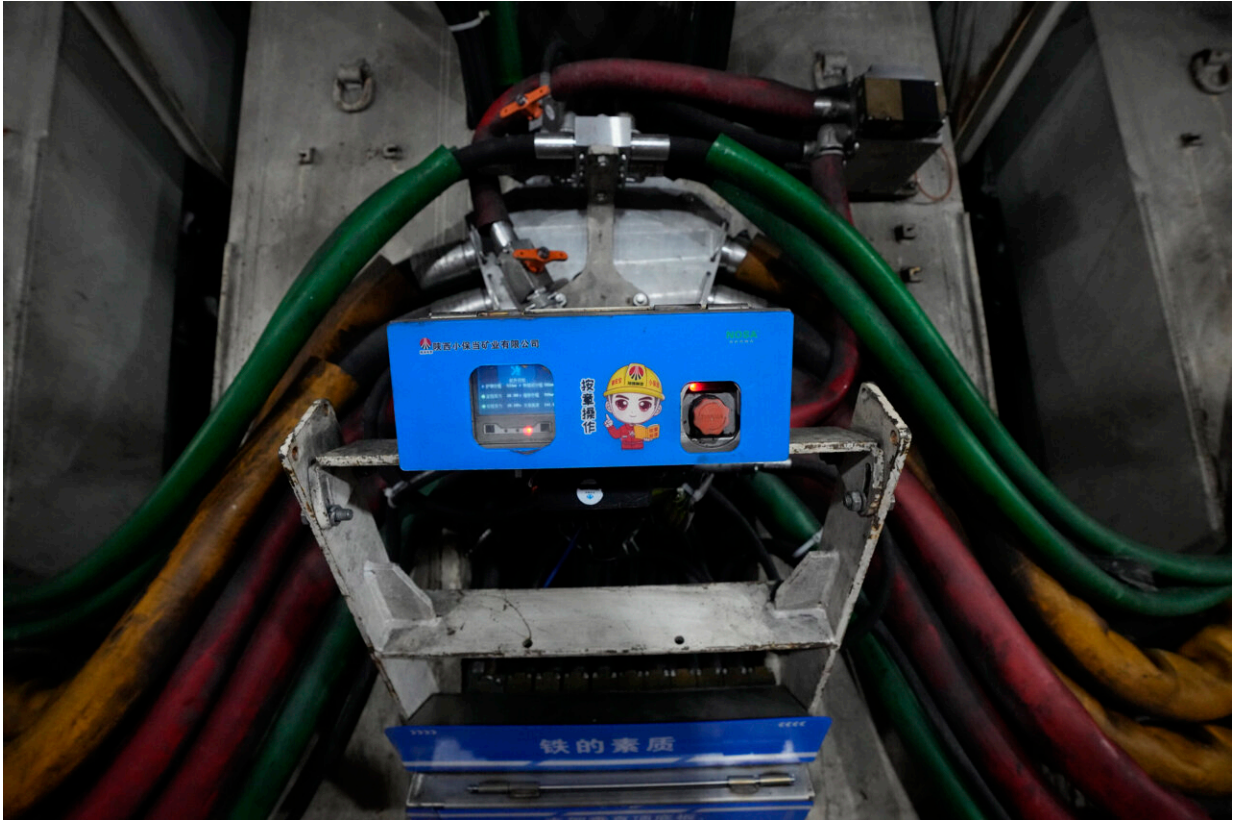
China is using "smart" technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses.

Smart-mine sensors monitor aspects such as gas buildup and flooding or ventilation levels, and set off an alert if any reach a dangerous level. The sensors, located inside the mine and on carts and tools, transfer the data via 5G, allowing for real-time monitoring by a central command.

Huawei Technologies Ltd., better known for [telecommunications equipment](#), teamed up with state-owned Shaanxi Coal Industry Co to pilot its intelligent coal mine technology in Hongliulin and Xiaobaodang. Huawei has pivoted to other industries including [self-driving cars](#), factories and mines amid U.S. sanctions that led it to report [a 70% decline in profits](#) from last year in March.

The system has allowed Shaanxi to reduce the number of people working underground by 42% at the Xiaobaodang mine, while increasing production levels. Miners now work with the help of robots, which monitor equipment while centrally-controlled shearers are used to collect coal.

In March, China said that 53 miners involved in an accident in a large mine in Inner Mongolia were either missing or dead. The mine collapsed in February after a landslide.



Mining equipment with a cartoon and slogan "Operate according to chapter" at the Xiaobaodang Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Wednesday, April 26, 2023. China is using "smart" technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



A miner pulls back the wire fence near the shearer at the mining face of Xiaobaodang Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Wednesday, April 26, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



Visitors to the Xiaobaodang Coal Mine stand near a poster promoting 5G technology used in the underground mine near the city of Shenmu in northwestern China's Shaanxi province on Wednesday, April 26, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



A worker operates a body scanner near a board displaying exemplary workers at the Xiaobaodang Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Wednesday, April 26, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



An aerial view of a Ecological Restoration Demonstration Park depicting dinosaurs is seen near the Hongliulin Coal Mine complex near the city of Shenmu in northwestern China's Shaanxi province on Tuesday, April 25, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



An aerial view of the Hongliulin Coal Mine complex is seen near the city of Shenmu in northwestern China's Shaanxi province on Tuesday, April 25, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



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A mine worker introduces the functions of an autonomous robot at the Xiaobaodang Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Wednesday, April 26, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



A mine worker stands near a caricature of a miner at the Xiaobaodang Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Wednesday, April 26, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



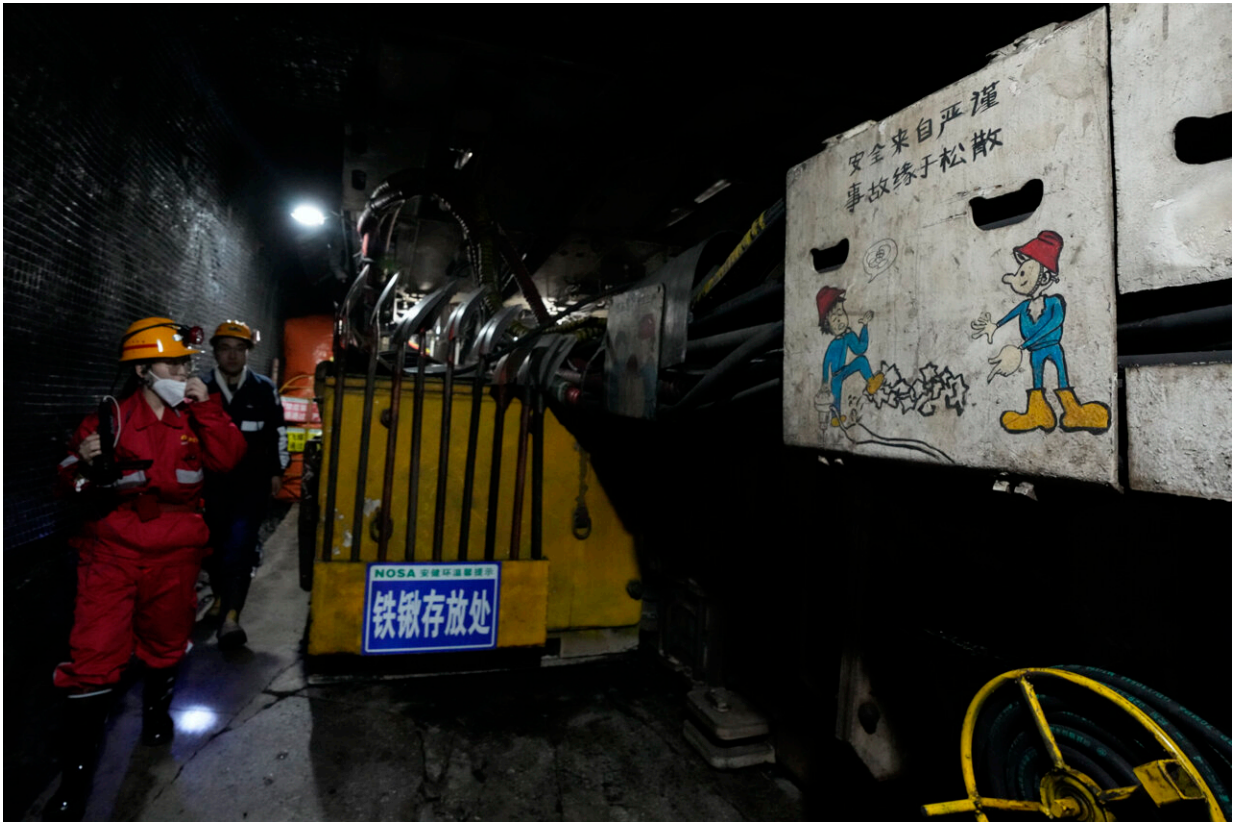
Workers monitor a control room at the Xiaobaodang Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Wednesday, April 26, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



Lockers for coal miners with displays showing the individual workers are seen at the Xiaobaodang Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Wednesday, April 26, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



A miniature depiction of a control center monitoring the shearer is seen at a show room of Xiaobaodang Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Wednesday, April 26, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



Visitors pass near a caricature depicting miners and the slogan "Safety comes from rigorousness, and accidents arise from loose attitude" at the Hongliulin Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Tuesday, April 25, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



Visitors pass near propaganda for the Communist Party with slogans "Jointly Build China Dream" and "Roll up your sleeve and carry on" in the Hongliulin Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Tuesday, April 25, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



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A miner shows a computer station near a window depicting the Chinese map and the words "China Dream" at the Hongliulin Coal Mine complex near the city of Shenmu in northwestern China's Shaanxi province on Tuesday, April 25, 2023. China is using "smart" technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



A miner stands near the hydraulic supports at the mining face as foreign journalists visit the Hongliulin Coal Mine complex near the city of Shenmu in northwestern China's Shaanxi province on Tuesday, April 25, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



A visitor wears her mask near the mining face of the Hongliulin Coal Mine complex near the city of Shenmu in northwestern China's Shaanxi province on Tuesday, April 25, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



Workers stand near an autonomous robot used to monitor equipment at the Hongliulin Coal Mine complex near the city of Shenmu in northwestern China's Shaanxi province on Tuesday, April 25, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



Drinks are served for visitors in an underground rest station of the Hongliulin Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Tuesday, April 25, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



A miner stands behind the window to an underground convenient store in the Hongliulin Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Tuesday, April 25, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan



A banner welcoming foreign journalists to a trip on intelligent mines is displayed in the Hongliulin Coal Mine near the city of Shenmu in northwestern China's Shaanxi province on Tuesday, April 25, 2023. China is using “smart” technology to try to improve its safety record in coal mines, as part of a push by the National Energy Administration to bolster output and stem frequent accidents and collapses. Huawei Technologies Ltd., better known for telecommunications equipment and the target of U.S. sanctions, has pivoted to other industries including self-driving cars, factories and mines. Credit: AP Photo/Ng Han Guan

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