

Agriculture

Early detection and prevention

IoT sensors powered by 5G can identify water, disease, and pest issues with pinpoint precision on farms.

Reduced water consumption:

Irrigation cycles, soil nutrition and moisture managed by IoT

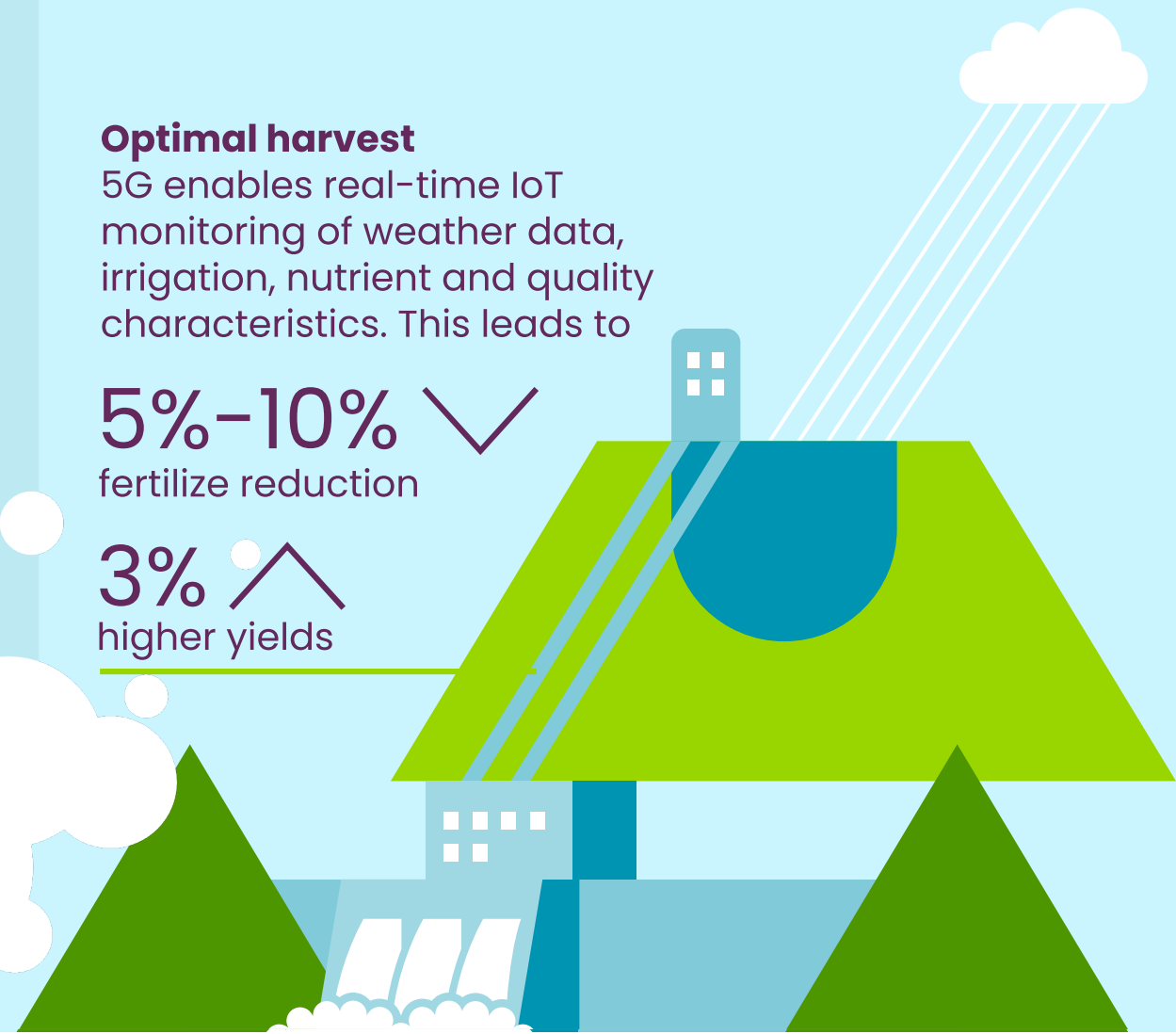
40% ✓
Water Reduction

Optimal harvest

5G enables real-time IoT monitoring of weather data, irrigation, nutrient and quality characteristics. This leads to

5%-10% ✓
fertilize reduction

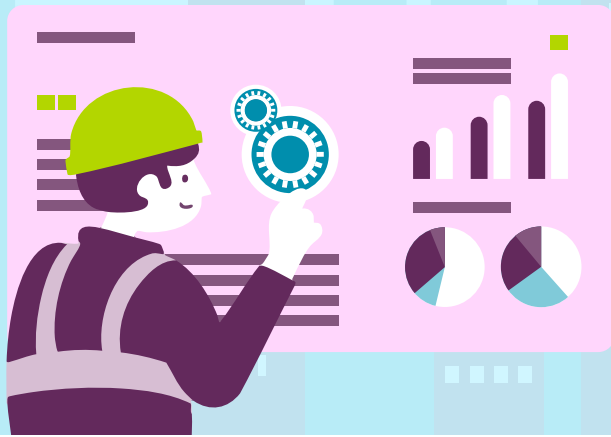
3% ^
higher yields



Industrial: Construction

Monitor construction: Connected robots can scan sites in 3D using CCTV, drones, and headsets, which means:

30%-40% 
more productivity



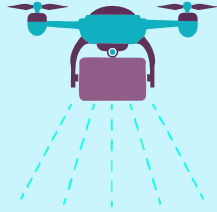
5G-enabled smart cameras can help inspect the precision of screwing, gluing and assembling thanks to AI assistance.

Steel production: Cold-rolled cranes remotely controlled, boosting loading and unloading efficiency by

400%



Industrial Smart Factories



**5G reduces factory
deployment costs by**

30% ✓

Smart machines can deliver needed parts nearly automatically. Drones and robots inspect factory floors and send back data.

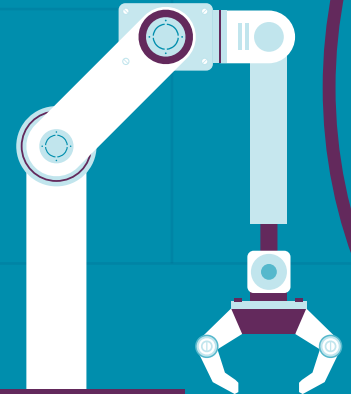
Smart factory wearables can locate people or objects, position their surroundings, and detect possible workplace risks early.



Systems can predict when equipment needs maintenance and **reduce costs for businesses.**

5G Robotic Arms

Workers can control robotic arms via 5G smartphones, reducing workplace hazards in the production process. This enhances worker safety and optimizes production material flow, resulting in higher product quality.

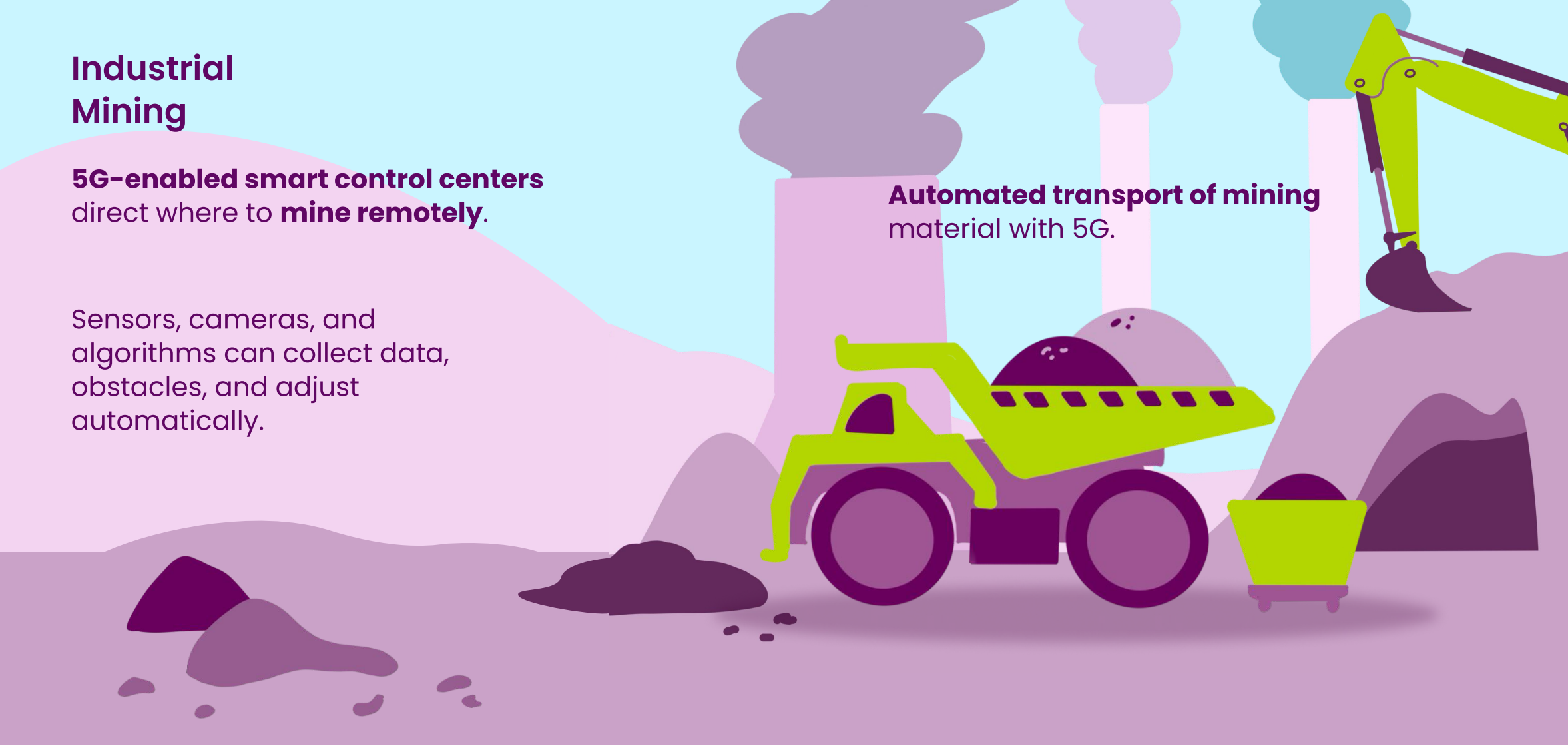


Industrial Mining

5G-enabled smart control centers direct where to **mine remotely**.

Sensors, cameras, and algorithms can collect data, obstacles, and adjust automatically.

Automated transport of mining material with 5G.



Mobility & Transportation

5G on **subways** enables:

up to

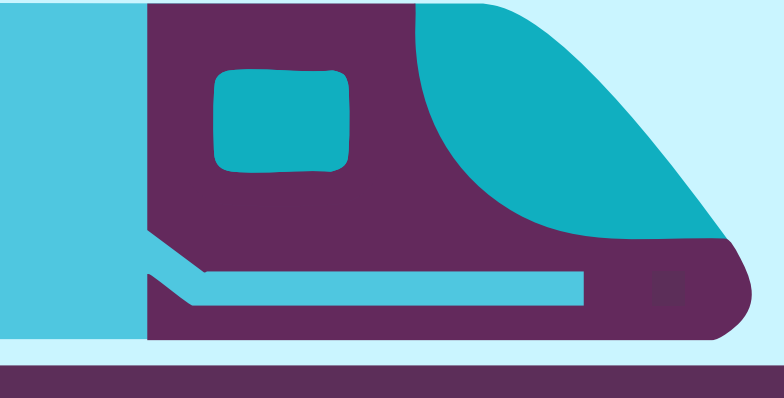
25x >>

faster public
Wi-Fi speed

&



Downloads of
up to 1.8 Gbps



Commuters can watch **high-definition (4K) videos** with 5G on their phones.

Smart Warehouse/ Marine industry

In smart warehouses, precise positioning based on weight and other storage parameters is constantly monitored. **5G** allows adjustments based on real-time data transmission.



5G provides up to

50KM

offshore connectivity for
boat passengers.

Improved safety for fisherfolk
and boat workers by detecting
unauthorized accidents such as
falling into the sea.

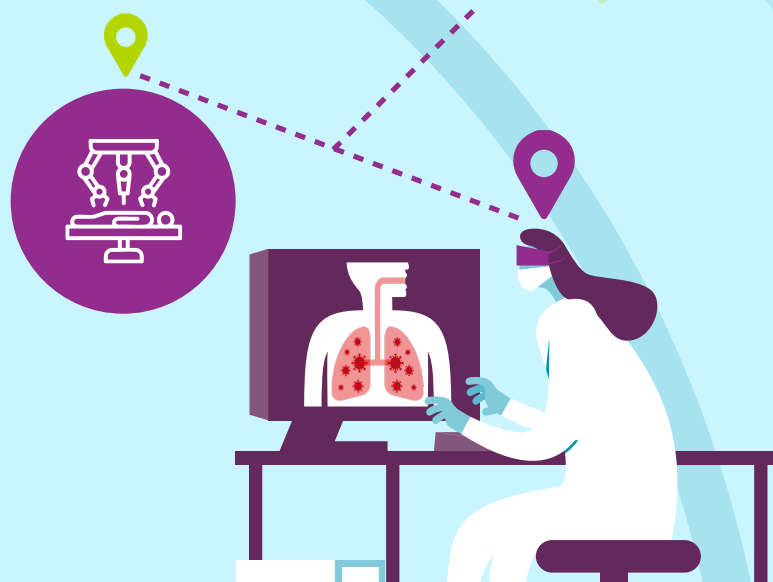
Smart sensors in cargo can
track temperature, humidity,
and other conditions during
transport with **5G**.



Healthcare & Life Sciences

World's first 5G-enabled remote robotic surgery:

Performed at 4,500 m altitude by surgeons **4,000 km away**.



Patients can use **z smart wearables that monitor their health** at all times and allow immediate feedback.



5G enables high-quality video consultations and online patient monitoring: patients in remote areas can access specialized medical care.

Drug research and development is assisted by machine learning and AI.



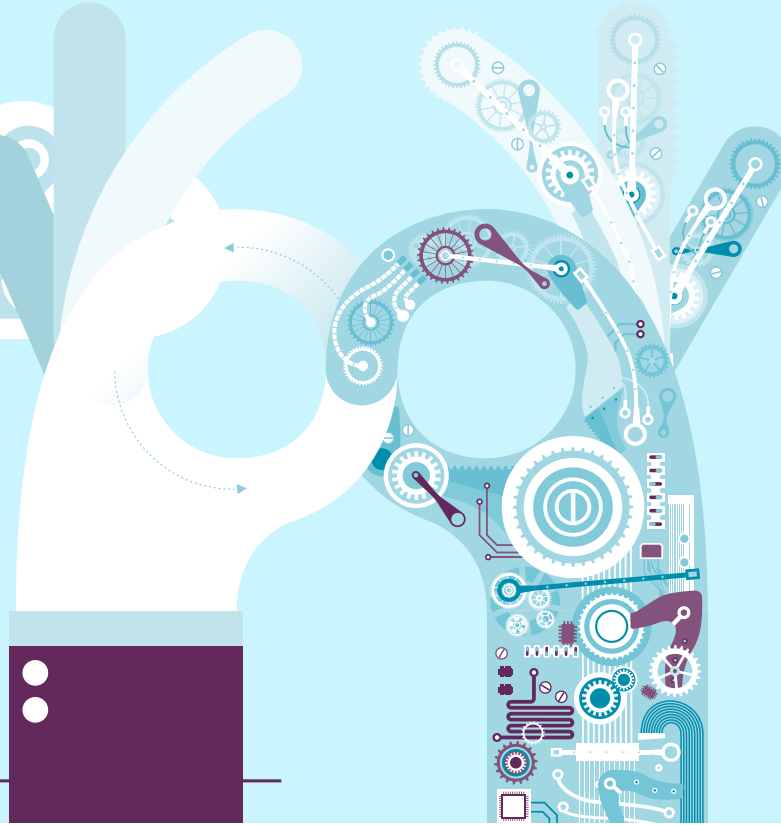
Consumer & Retail

Consumers can try virtual products through **augmented reality** applications powered by **5G**.



With **5G**, users can **interact with virtual objects in real time**, feeling realistic tactile sensations as if the objects were physically present.

Real-time tracking of goods.
Businesses can predict delivery times and minimize delays.



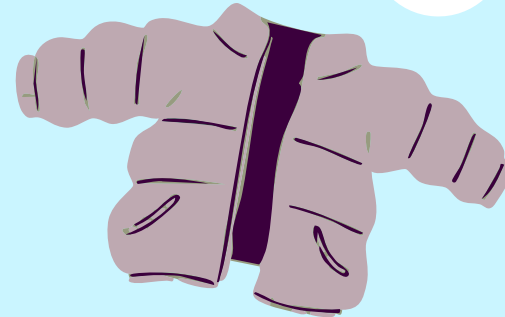
Smart Clothing

Smart clothes combine **built-in sensors with 5G connectivity to deliver real-time information** about your health, fitness and safety.

They send this data instantly through **5G networks** and can connect multiple pieces of clothing or devices at the same time.



Smart clothes can measure your heart rate, muscle activity, movement and environmental conditions.



With **5G**, your clothes become part of an intelligent network that helps you stay healthier, safer and more connected every day.

Smart Cities & Public Services

Intelligent transportation network: Densely populated metropolitan areas are more efficient with **5G**.

By collecting and analyzing data from sensors and cameras, smart transportation networks can **dynamically adjust traffic light timing**

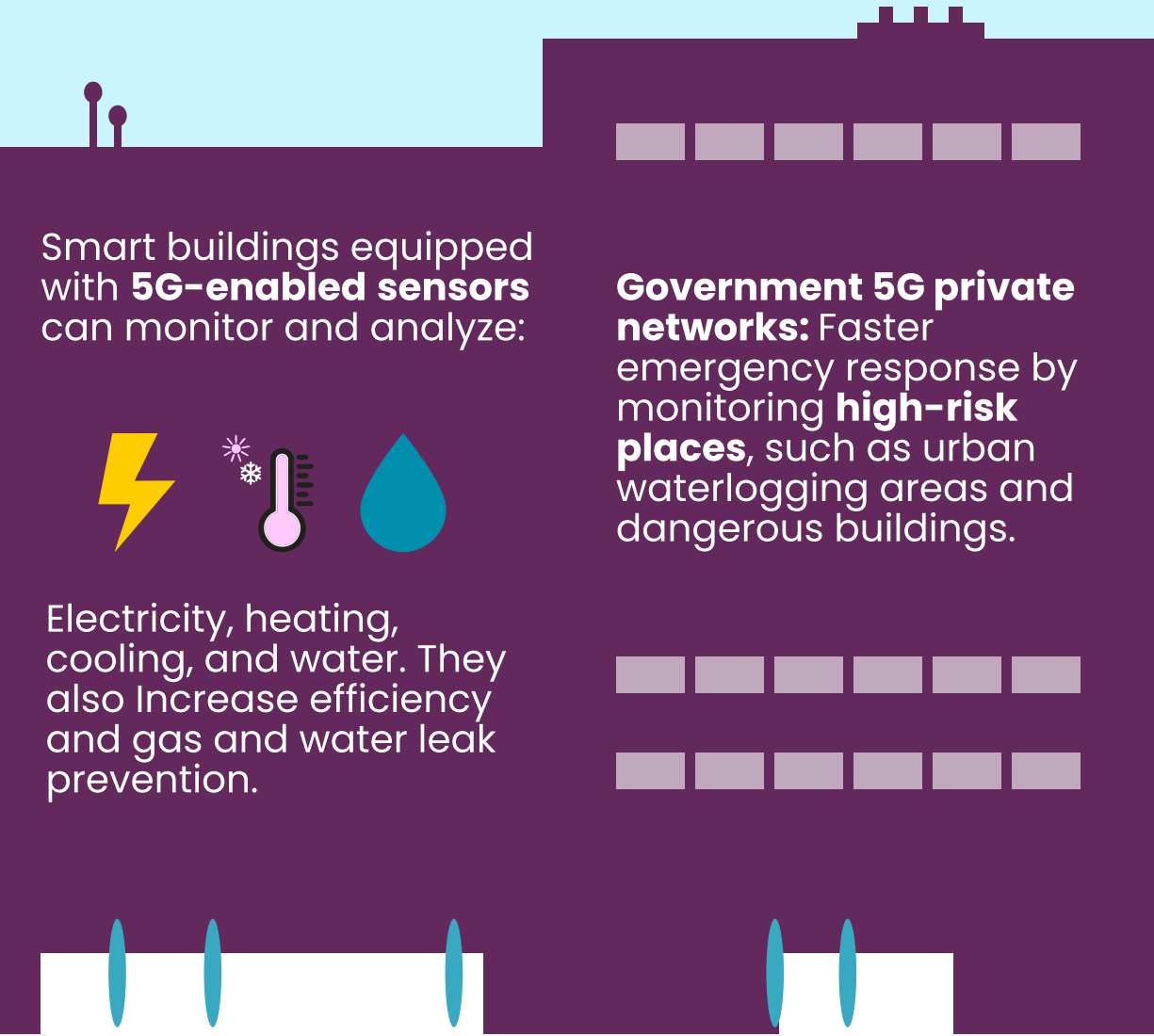
and minimize traffic jams by **30%** ✓



Smart buildings equipped with **5G-enabled sensors** can monitor and analyze:



Electricity, heating, cooling, and water. They also increase efficiency and gas and water leak prevention.



Government 5G private networks: Faster emergency response by monitoring **high-risk places**, such as urban waterlogging areas and dangerous buildings.

Education

E-learning platforms improved

25% 
student performance.

IoT-enabled smart boards, wearable sensors for attention monitoring, enabling **interactive, data-driven teaching**.

5G-connected tablets or virtual reality headsets for **personalized and experiential learning**.



Finance & Business

Delivers speeds up to 10 Gbps, about **100× faster than 4G**.
It also enables real-time buying and selling with almost no delay.

Provides instant data updates, so **traders can react immediately** to market changes.
Improves accuracy and stability, helping investors make faster decisions.



5G helps people act instantly on opportunities and stay connected to global markets anywhere and anytime.

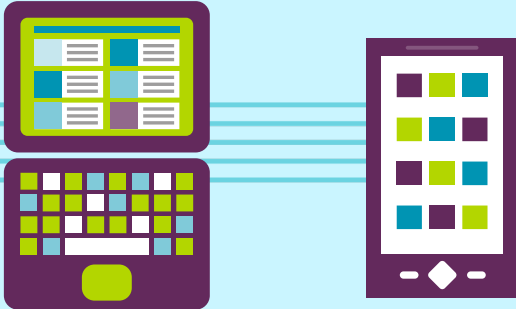
Virtual meetings and training simulations are more efficient now.

Entertainment

5G Broadcast: Near-instant content, live TV, radio, and public warnings are delivered straight to smartphones using **5G** connectivity.

Gaming is smoother and faster. **5G** allows gameplays with minimum lag or delay and boosts latency from

50ms – 1ms



VR Gaming: Wireless and lightweight full body suits connected to **5G** can ensure immersive and sensory-rich experience.

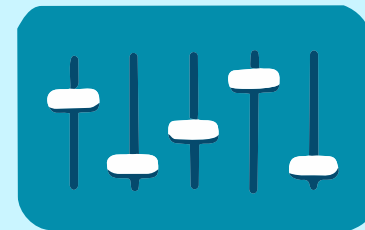


Music Industry

Musicians in different places can stay in perfect rhythm **with minimum delay (17 milliseconds)**.

A virtual concert enabled by **5G** connected two Chinese locations 220km apart.

Virtual concerts are accessible in real-time to people attending online.



Musicians in different locations can play and record together live, as if they were in the same room.



With **5G**, more people can stream high-quality audio and video at the same time twice as fast as before.



Film Industry

5G-enabled VR headsets show actors the virtual world in real-time: from spaceships to fantasy worlds.

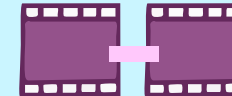
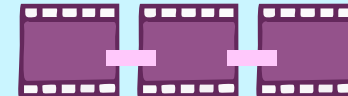
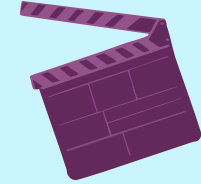
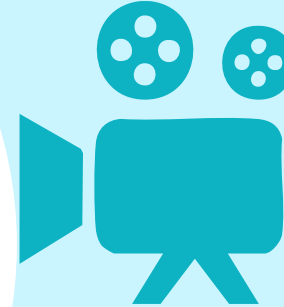
Special effects artists can merge the actors with the virtual background in as little as

10 minutes



Directors can **preview film shots with effects in real time on set.**

When filming is done, the shot is sent instantly to post-production artists anywhere in the world.



Formula 1 Car Racing

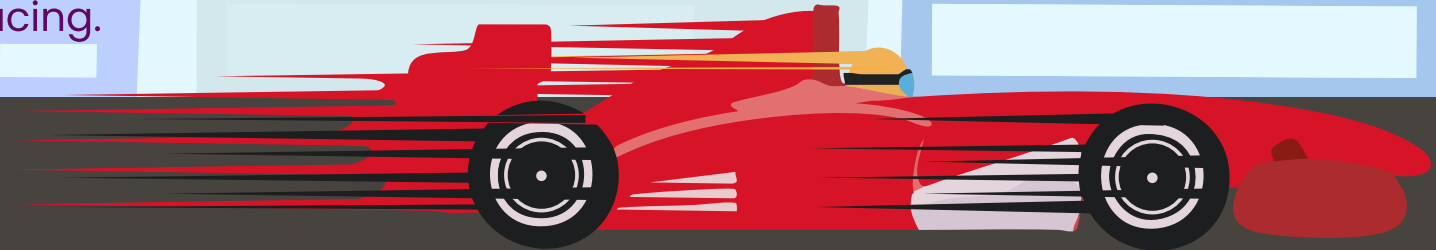
Each Formula One car has thousands of sensors that collect millions of data and automatically send them to the data center during the race.

5G works at speeds up to
213 km/h

maintaining a smooth connection even while racing.

Doctors can view inside the car using drone cameras, access real-time health data to diagnose injuries instantly, and connect immediately with all emergency services.

5G-enabled wearable devices can **track driver's health during the race.**



Sustainability

Smart Forests: 5G connects satellites, drones and sensors so people can monitor forests more effectively. Detect pollution, disease or damage to vegetation.

Spot early signs of fires, floods or illegal logging from above. Track moisture, temperature and tree health.

This enables experts to act quickly in emergencies, prevent forest loss and restore damaged areas.

