

CLIMATE
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Working in a warmer world

Die Sommer in Europa werden immer wärmer, Tendenz und Temperatur weiter steigend. Darunter leidet die Produktivität. Wie sich unsere Arbeitsplätze in Zukunft verändern könnten.

Von CHIPONDA CHIMBELU

ADVANCED

Chris Middleton, co-founder of the Berlin-based architecture firm Kinzo, which specializes in building and renovating office space, has seen a change in how architects and businesses think about heat in the workplace. “Overall, awareness about extreme heat has increased dramatically,” Middleton told *Business Spotlight*. “In southern Europe, they’ve been dealing with that issue for quite some time, but it’s now certainly a reality in northern Europe, too.”

The summer of 2025 was the fourth-hottest on record in Europe, which is the world’s fastest-warming continent. The effects of rising temperatures are felt through poor harvests and lower economic growth and, tragically, with a rise in heat-related deaths. The insurance group Allianz estimates that the 2025 heatwave may have cost Europe up to half a percentage point of GDP. Globally, the costs of extreme heat are rising. A study by Dartmouth University calculates that, from 1992 to 2013, extreme heat cost an estimated \$16 trillion because of the effects on health, productivity and agricultural output. For northern Europe, this is a relatively new issue, and the region is not well prepared. From construction and agriculture to tourism and insurance, industries are likely to see significant changes and challenges due to rising temperatures.

Protecting people and productivity

“There is no binding EU-wide legislation that protects workers from extreme heat, so companies are not forced to address it,” says Andreas Flouris, a professor of physiology at the

“It’s now certainly a reality in northern Europe, too”

co-founder

- ▶ Mitgründer(in)

overall

- ▶ insgesamt

awareness

- ▶ Bewusstsein

issue

- ▶ hier: Problem, Thema

on record

- ▶ jemals verzeichnet, seit Beginn der Aufzeichnungen

harvest ▶ Ernte

heat-related

- ▶ hitzebedingt

GDP (gross domestic product) ▶ BIP (Bruttoinlandsprodukt)

- ▶ BIP (Bruttoinlandsprodukt)

trillion

- ▶ Billion(en)

output

- ▶ Ausstoß, Ertrag

due to

- ▶ aufgrund, infolge

binding ▶ verbindlich

address sth.

- ▶ etw. angehen

University of Thessaly, in Greece. Flouris is also an external adviser on heat in the workplace for the World Health Organization (WHO) and the International Labour Organization (ILO). “There’s very high variability in terms of the ability of companies to address heat adaptation,” he says. “Some businesses are well prepared and protect their workers (and their bottom line) but, unfortunately, it’s a very small percentage.”

Flouris says large businesses tend to be better placed to protect employees because they already have high occupational-safety standards and more resources to spend on those efforts. However, the majority of European employees, about 160 million people, work for small and medium-sized companies (SMEs), according to data from Eurostat. Most are in companies with fewer than 50 employees. “In these very small businesses, it’s often the owner who’s in charge of occupational health and safety,” says Flouris. “They have to deal with so many other issues that this is just one other thing that they have to do, so they don’t address this at all.”

In parts of the UK, too, summer days of over 30 degrees have become common, and the country experienced its warmest summer on record in 2025. However, workplace changes have been slow — if they’re happening at all. The Institution of Occupational Safety and Health (IOSH) reported, in an email statement to *Business Spotlight*, that they know of “no case studies or other evidence of specific industries or employers taking a proactive approach toward worker protection [from extreme heat]”.

This will have to change. The world is getting hotter, and heat lowers productivity. When it’s hot, people slow down. Also, cognitive ability suffers, which means workers tend to make worse decisions and take more risks. Dr Tim Fox, one of the co-authors of a report by the Institution of Mechanical Engineers, wrote: “Adapting industries to, and preparing them for, a warmer world will be essential for the future successful functioning of societies.”

While people who work outdoors are most directly affected, heat is dangerous indoors, too — anyone doing physical work or who is required to wear personal protective equipment (PPE) is particularly at risk of heat stress.

Finally, it’s not just people who have difficulty with heat. The chemical industry, pharmaceuticals, food and beverage, and many other sectors work with temperature-sensitive processes and equipment. When the ambient temperature rises, the thermal extraction (which means “cooling”) needed to control chemical reactions, for example, becomes harder and costlier, which will hurt overall productivity.



Extreme heat affects health, productivity and agricultural output

Is AC the answer?

“In southern European countries, like Cyprus, Greece, Italy, Spain and even southern France, there is generally more infrastructure to cope with heat, such as widespread air conditioning,” says Leonidas Ioannou, an academic at the Medical School of the University of Cyprus. “However, dealing with heat is not only about infrastructure, it’s also about adaptation.”

It takes a few weeks for people to adapt physiologically to heat. In the first days of a heatwave, we typically don’t have a high capacity to dissipate heat through sweating and peripheral vasodilation — a biological process in which blood vessels expand to increase heat loss via the skin. This leads to greater heat

adviser

► Berater(in)

in terms of

► in Bezug auf, hinsichtlich

bottom line

► hier: Geschäftsergebnis

better placed: be ~ to do sth.

► besser in der Lage sein, etw. zu tun

occupational safety

► Arbeitssicherheit

charge: be in ~ of sth.

► für etw. verantwortlich sein

case study

► Fallstudie

evidence

► hier: Beleg, Anhaltspunkt

proactive approach

► proaktiver Ansatz

lower sth.

► etw. senken, reduzieren

suffer

► hier: beeinträchtigt werden

co-author

► Mitautor(in)

outdoors

► im Freien, draußen

indoors

► in Innenräumen

risk: be at ~ of sth.

► Gefahr laufen, von etw. betroffen zu sein

heat stress

► Hitzebelastung

sector

► hier: Branche, Bereich

temperature-sensitive

► temperaturempfindlich

ambient temperature

► Umgebungstemperatur

thermal extraction

► hier: Wärmeabfuhr

costlier

► teurer, kostenintensiver

cope with sth.

► mit etw. zurechtkommen, etw. bewältigen

widespread

► weit verbreitet

dissipate heat

► Wärme abgeben

sweating

► Schwitzen

blood vessel

► Blutgefäß



It takes a few weeks to adapt physiologically to a heatwave

strain and makes sudden heatwaves so dangerous, particularly in places that lack cooling infrastructure. It also shows why it's important to react quickly — fatalities tend to cluster at the beginning of a heatwave, Ioannou explains, adding that age and pre-existing health problems further increase the risks. "There is no one-size-fits-all approach," he says.

The need to adapt to heat will likely change both physical workspaces and work practices — including working hours — to avoid the hottest parts of the day. That's going to be disruptive, and it creates a need for investment in cooling infrastructure. Data shows that the number of air-conditioning (AC) units installed across Europe is rising fast but still low compared with Asian countries and the US.

Of course, AC uses a lot of energy — it's one of the primary drivers of global electricity demand. Boston Consulting Group has reported that increasing use of AC will put further pressure on energy grids, some of which will struggle to cope. In June 2025, for example, France saw electricity demand peaks about 25 per cent higher than the off-season average, and Italy suffered blackouts as its power grid couldn't manage.

Air conditioning isn't the only solution, however. In the 2024 report "Heat at Work: Implications for Safety and Health", Flouris and other researchers offered other recommendations such as providing hydration along with cool, shaded and ventilated rest areas, and allowing workers to take enough breaks or self-pace at work. While these ideas may seem simple, even obvious, a lot of smaller businesses could find it hard to implement them. "Large corporations have the bandwidth to look into the future," Flouris says. "They see that [heat] causes issues both in attrition of workers — they lose workers because of this and they have a lot of insurance claims — and they lose productivity."

"Dealing with heat is not only about infrastructure"

strain ▶ Belastung

lack sth.

▶ etw. nicht haben

fatality

▶ Todesfall

cluster

▶ sich häufen

pre-existing

▶ bereits bestehend, vorbestehend

one-size-fits-all approach

▶ Patentlösung

disruptive ▶ störend, einschneidend

driver ▶ hier: Hauptfaktor, Treiber

pressure: put ~ on sth.

▶ etw. unter Druck setzen, etw. belasten

grid ▶ hier: Netz

off-season

▶ Nebensaison

blackout ▶ Stromausfall

hydration

▶ Flüssigkeitszufuhr

shaded ▶ schattig

rest area ▶ Ruhebereich

self-pace

▶ hier: eigenes Arbeitstempo bestimmen

bandwidth

▶ hier: Kapazität, Spielraum

attrition

▶ Schwund, Abgang

insurance claim

▶ Versicherungsanspruch, Schadensmeldung