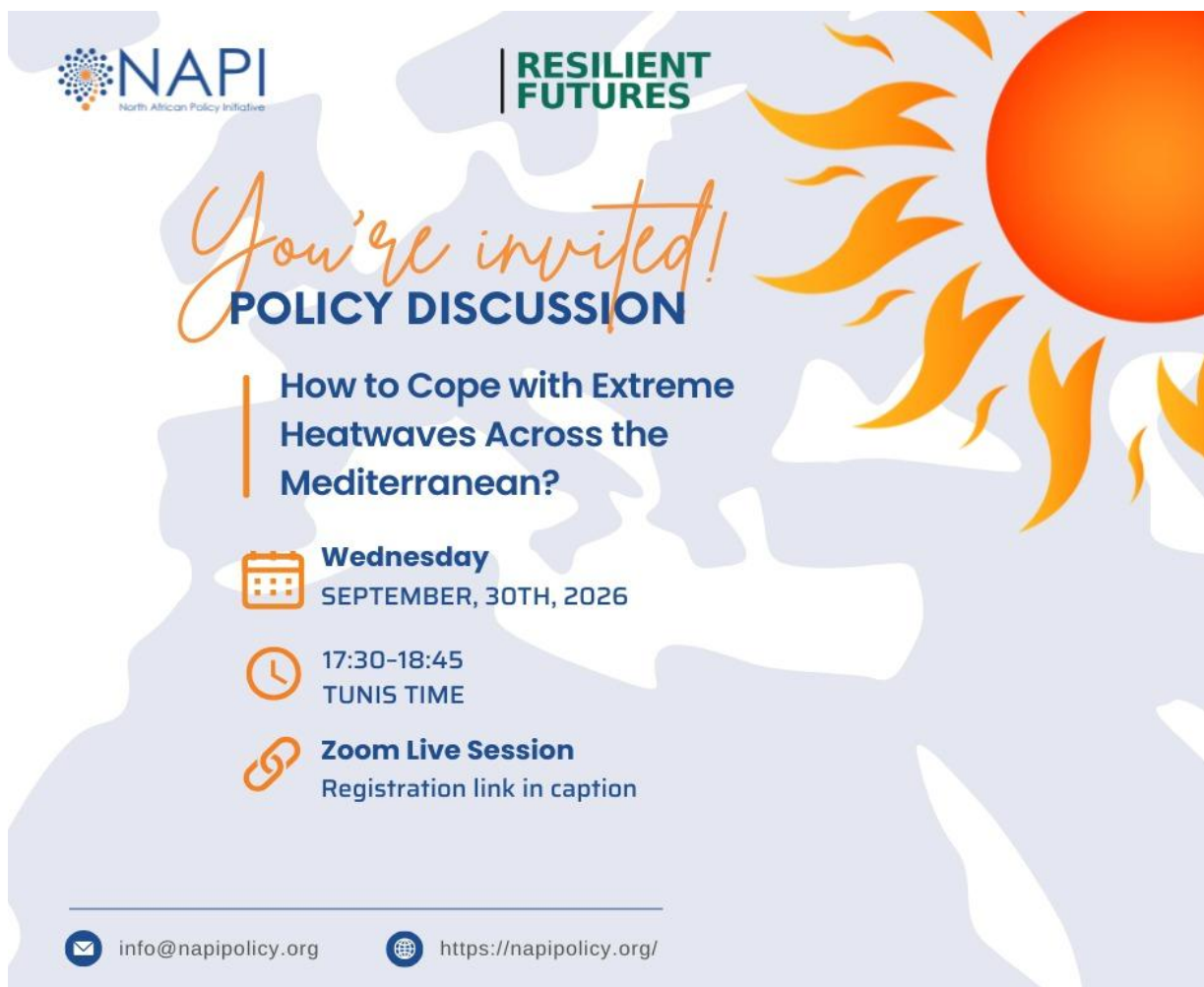


Management of heatwaves in the Mediterranean

Discussion Insights & Takeaways



On 30 September 2026, the **North African Policy Initiative** and **Resilient Futures** convened an online policy discussion on how societies and governments should cope with extreme heatwaves in the Mediterranean. This note captures the main insights and takeaways. It is written for those who attended, and for those who could not.

1

The exposure gap between the two shores is not the problem

Summer 2026 was a six-month, basin-wide event. Western Europe recorded its [warmest summer ever measured](#), 2.54 °C above the 1991–2020 baseline, surpassing 2003. Fires burned [nearly 670,000 hectares across the EU](#), and more than **1.2 million hectares across both shores of the Mediterranean**. Tunisia set a [national record of 49.7 °C in Kairouan](#).

But the telling comparison is not at the level of temperatures. It is about how each country managed them.

Country	Episodes	Published human toll
Spain	5 (61 days)	5,232 heat-related deaths — highest since 2015
France	3 (53 days)	More than 7,300 excess deaths
Germany	—	Around 15,800 excess deaths
Tunisia	2 — shorter, hotter	None published

Tunisia faced **fewer episodes than countries in the northern shore of the Mediterranean, at higher temperatures, with no national heat plan and no dedicated crisis-management body**. Data on mortality from North African countries is absent from every database — not because no one died, but because the governments did not publish the figures. The asymmetry is in institutional response, not in exposure.

2

The hazard is a meteorological phenomenon, the resulting mortality depends on management

The WHO European region has lost around 200,000 people to heat in five years, and the WHO's own assessment is that [nearly all of those deaths were preventable](#). The same temperatures kill very differently depending on what a country has built. Economically, the summer has been costed at [180 billion euros](#) — roughly one point of European GDP, meaning a single hot summer can absorb a year of growth.

Heat defeats disaster institutions because it does not behave like the hazards they were designed for. It has no perimeter and no epicentre. It kills over weeks, indoors, through cardiovascular and respiratory

causes recorded as something else. And it is the most socially selective hazard we face: two people on the same street do not experience the same heatwave.

✓ Heat is governed, or not governed, long before the thermometer moves.

3 The regional gap is not in forecasting — it is in the response

Heat is among the most predictable hazards we have: it is the surface expression of a blocking anticyclone, a system a thousand to three thousand kilometres across, persisting for days. It is also forgiving of error — forecast 43 °C and get 41 °C, and the right response is unchanged. The precision available already exceeds the precision the decision requires.

So every warning system should be read along two layers.

Layer	What it contains	State of play across the basin
Meteorological	Who issues the alert, what colours, how often it is updated	Generalised. It works. Tunisia, Morocco and Algeria all run four-colour vigilance including heat; Morocco updates three times a day down to municipal level.
Response	What automatically happens at each colour, and who owns that action	Where everything is decided. None of the three publishes a temperature threshold, and none attaches a legal obligation to a colour.

What is an early warning system?

Four components: knowing who is at risk, forecasting the hazard, communicating, and having the capacity to act. Forecasting is one of four. The region has built that one and left the other three largely undone.

What the leading systems do differently

- **Spain does not watch temperature.** Its Kairós index forecasts the probability that excess mortality will exceed 10 %, four days ahead, with thresholds derived from observed temperature–mortality relationships across 183 climatic zones. [National plan](#)

- **Italy models each city separately.** The same 38 °C does not produce the same alert level in Milan and Palermo. [HHWW system](#)
- **Spain's alert is a legal trigger.** An orange or red warning creates, the same day, an employer obligation to adapt working conditions. [RDL 4/2023](#)
- **France's alert produces a list of names, not a broadcast.** Communes have been required since 2004 to keep a register of isolated elderly residents, with a [dedicated chapter of the Labour Code](#) activating at yellow.

These are not weather alerts with a health label. They are **health forecasts built on weather data** : This difference is the real technical and administrative challenge.

An uncomfortable fact

Every codified plan in this basin dates from 2004, and exists because of the 2003 heatwave and its seventy thousand deaths. Not one was designed before. Tunisia announced its first early warning coordination system in August 2026 — after the July peak.

4

Anticipation means taking action before a heatwave hits, rather than simply building capacity

When an alert occurs, four things should happen: hospitals switch to a heat protocol; someone checks on isolated people at home; exposure stops through suspended or adapted outdoor work; and someone counts. What determines whether they happen is not resources. It is whether the action was decided before the season or during it.

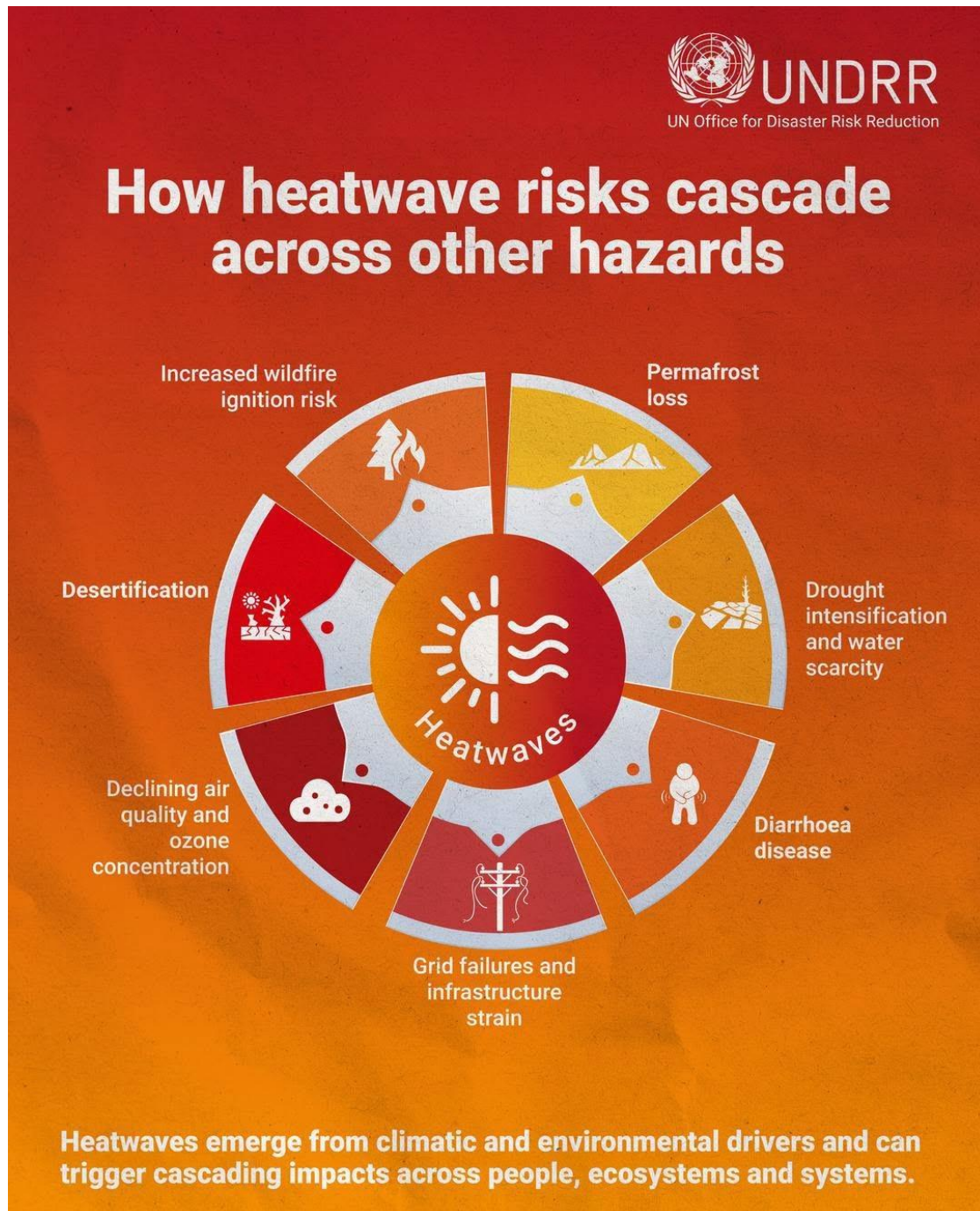
Greece can [suspend outdoor work across four regions within hours of a forecast](#) — not because the Greek state is faster, but because the decision was already taken, in a ministerial order, months earlier. In anticipatory mode the alert asks no one to decide anything; it asks them to execute.

Cascading effects: when one heatwave becomes several emergencies

Heat hits electricity, water and everything depending on both at once, because they share a driver: cooling demand spikes exactly when thermal plants lose efficiency. In Tunisia the chain ran from heat to cooling demand to grid strain, to disrupted production lines including water bottling, and on to poultry mortality reaching 100 % in some units.

Causality matters here: investment in electricity generation fell by **87 %** between the 2016–2020 and 2021–2025 periods. The heatwave did not create that gap; it revealed it. Nor is this a southern-shore fragility — France took up to 3.65 GW of nuclear offline over thermal discharge limits, and Poland triggered its emergency capacity reserve three times in one summer.

How heatwave risks cascade across other hazards



Source: UN Office for Disaster Risk Reduction

Heat is rarely the only hazard in play: it ignites fires, deepens drought, degrades air quality and strains the grid at the same time. The UNDRR wheel shows these as one system rather than eight separate files — which is precisely what no ministry currently owns.



The universal failure is the silo: energy manages energy, health manages health, and nobody manages the coupling.

5

Three no-cost measures before next June

Framed for finance ministries rather than health ministries: adaptation and early warning show [benefit–cost ratios between two to one and ten to one](#), and the return is front-loaded. This is a budget-cycle decision to settle in the coming months.

1

Hold a formal interministerial review of last summer, now

While the memory is fresh. It costs almost nothing and stops every season beginning from scratch.

2

Publish the human toll

Excess mortality disaggregated by age and region, not consultation counts. The Ministry of Health reported [633 cases treated and no mortality figure at all](#). The bottleneck is worth naming precisely: the collection instrument exists and works — emergency departments use a clinical form distinguishing sunstroke from heat stroke and following the patient to outcome. The problem is not that we cannot count. It is that we do not publish. And publication is what unlocks budget, besides being the precondition for ever calibrating alerts on mortality rather than temperature.

3

Give heat a legal category

Tunisia's 1991 disaster law is built for the sudden, visible, localisable event — something with a perimeter, with victims to rescue, with damage you can photograph. Heat does not fit that template, so it falls outside the category. Everything follows from that single exclusion.

The contrast with floods makes the point

Floods are a recognised calamité under the 1991 law; heat is not. Floods carry dedicated funding — 396 and 132 million dinars, plus 175 million dollars — a standing crisis body, and a ministerial council held before the rainy season. Heat has none of the three, and its plan was announced after the July peak.

Both alerts come from the same meteorological institute, with the same four colours. Everything downstream diverges because of a legal category, not a difference in capacity or conviction — which also answers the objection that the means are lacking: Tunisia does fund anticipation, for the hazard next door.

As long as heat has no legal category, every plan written for it remains revocable, unfunded and dependent on whoever is in office.

The instrument that category should carry is a national heat and health action plan on the [eight WHO elements](#), second edition June 2026. Not a circular, not a campaign. This is also how a country delivers commitments it has already signed: heat sits in both the health and early-warning targets of the [Paris Agreement's Global Goal on Adaptation](#), and the deadline for universal early warning coverage under [Early Warnings for All](#) is **the end of 2027** — eighteen months away.



Review what happened, publish what it cost, and give heat the legal standing that turns a plan into an obligation.

None of the three requires new money, and all three can be done before June 2027.

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