anka/31

A SPECIAL COP31 PUBLICATION BY ANKA NEWS AGENCY

NO. 3

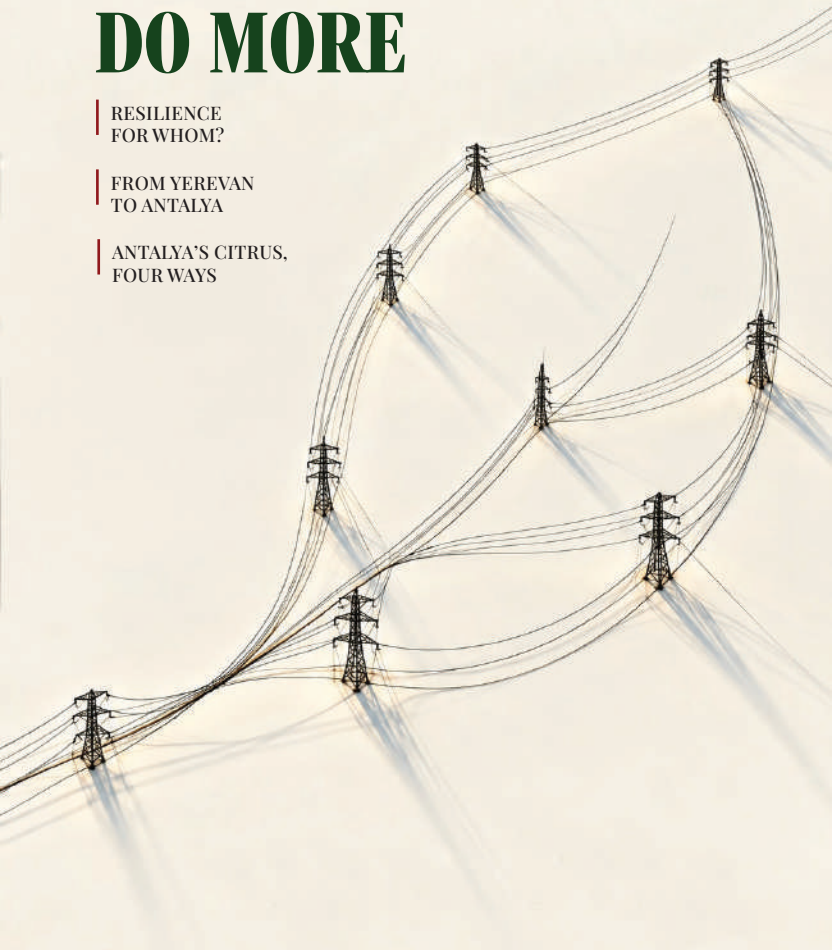
ANTALYA
NOVEMBER 2-8

THE MACHINE WE ARE ASKING TO DO MORE

RESILIENCE FOR WHOM?

FROM YEREVAN TO ANTALYA

ANTALYA'S CITRUS, FOUR WAYS



CONTENTS

01 **FROM ANKA: A RECURRING QUESTION**

What kind of climate are we creating? A question that followed us through this issue

02 **THE MACHINE WE ARE ASKING TO DO MORE**

The energy transition needs more electricity. But can the grid expand fast enough, while withstanding the climate it is built to function in

06 **RESILIENCE FOR WHOM?**

Four workers died when a tornado struck their temporary accommodation in Antalya. Their deaths ask who is actually protected in the event of extreme weather

08 **FROM YEREVAN TO ANTALYA**

As biodiversity COP17 concludes in Armenia, what should the climate talks in Antalya learn

11 **ANTALYA'S CITRUS, FOUR WAYS**

From Ottoman chicken soup to bergamot peel jam: four very different ways to put Antalya's citrus to work

13 **PHASELIS: WHERE THREE HARBOURS MEET THE FOREST**

An ancient trading port where Roman streets, pine forest and three sheltered bays meet the Mediterranean



FROM ANKA

A RECURRING QUESTION

Climate change is often treated as something to prepare for: an extreme event to withstand, a risk to manage, a future impact to adapt to.

But what if it has to become part of how we plan almost everything?

That question runs through this issue of ANKA31.

We started with an electricity grid. Countries are preparing to expand their networks as renewable generation grows and more of transport, heating and industry moves towards electricity. Türkiye alone estimates that an additional $28 billion in grid investment will be needed to accommodate its target of 120 GW of wind and solar by 2035.

But while working on that story, another question kept returning: what climate are we building all of this for?

A power line installed today may still be carrying electricity decades from now. By then, the weather conditions around it may be different from those engineers once used to plan such infrastructure. Extreme heat can push electricity demand up while putting parts of the system itself under pressure.

Then we came to resilience.

Resilience can mean a stronger electricity grid. A flood barrier. Heat-resistant infrastructure. A city capable of keeping transport and public services running through an extreme weather event.

But resilience is also about the people standing on the road laying asphalt in the heat, harvesting crops under the sun, delivering packages through a storm or sleeping in temporary accommodation beside a construction site.

That last example is not hypothetical. In Antalya's Kepez district, four workers were killed after a tornado tore apart the containers where they were staying.

And suddenly a word like "resilience" becomes much less abstract.

Who had somewhere safe to go? Who knew what to do when the warning came? Who was protected, and who remained exposed?

You can follow that question surprisingly far. From an electricity grid to a workplace, from the biodiversity talks in Yerevan to the climate talks about to begin in Antalya, this issue kept bringing us back to the same thing: climate is becoming harder to separate from everything around it.

Perhaps that is why these stories ended up belonging together.

They are about different things. But each, in its own way, asks us to look at something familiar, a power line, a workplace, a city, a landscape, and consider the climate in which it now must exist.



THE MACHINE WE ARE ASKING TO DO MORE

The electricity grid performs an extraordinary balancing act: at every moment, power generation has to keep pace with demand. Now the energy transition is asking it to do much more, just as a warming climate is changing the conditions under which it has to work.

You notice the electricity grid mostly when it stops working. The rest of the time, a switch is flipped and a light comes on. A train moves. A factory starts a machine. A hospital powers an operating theater. Increasingly, a car is plugged in, a building is cooled and a home is heated.

Behind all of this sits an enormous interconnected machine. And both sides of that system are changing.

For years, electricity demand in many advanced economies was relatively flat, as efficiency improvements and changes in the structure of economies weakened the old link between economic growth and electricity consumption. That period is ending.

On the demand side, electric vehicles, heat pumps and parts of industry are shifting activities once powered directly by fossil fuels onto the electricity system. This is not merely a side effect of the energy transition; it is one of its central strategies. Building wind turbines and solar panels can clean up electricity generation, but decarbonizing an economy also means replacing some of the fossil fuels burned directly in cars, buildings and factories with increasingly low-carbon electricity.

At the same time, the rapid expansion of data centers, driven increasingly by AI, is adding another major source of electricity demand, one that has little to do with decarbonization.

On the supply side, wind and solar are replacing some of the conventional power generation around which grids were built. They can also change where electricity enters the system: some of the best renewable resources are far from the cities and industrial centers where much of that electricity will ultimately be consumed.

And the climate crisis adds another layer of pressure. Rising temperatures can increase electricity demand for cooling, while extreme heat can simultaneously reduce the performance of parts of the system supplying and carrying that power.

So the challenge is not simply that the world will need more electricity. It is that we are building a different electricity system. The grid is being reshaped from three directions at once: what produces electricity, what depends on electricity, and the climate in which the system has to operate.

CAN THE GRID KEEP UP?

There are already signs that grid infrastructure is struggling to keep pace. More than 2,500 GW of renewable generation, storage and large electricity-consuming projects are sitting in grid connection queues worldwide, according to the International Energy Agency.

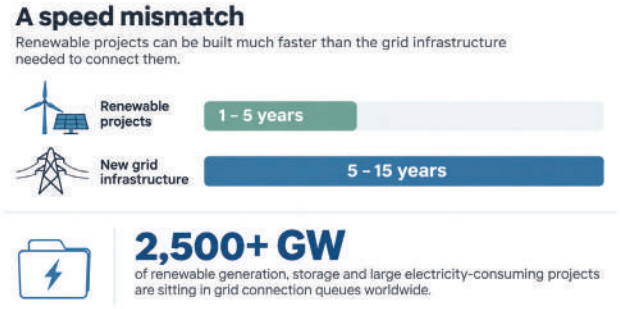
Part of the problem is speed. Renewable projects can often be built considerably faster than the transmission infrastructure needed to connect them. The IEA puts typical development times for new grid infrastructure at roughly five to 15 years, compared with one to five years for renewable projects.

That gap changes how we should think about the energy transition: its pace depends not only on how quickly countries can add clean generation, but on whether transmission and distribution networks can expand and adapt at anything close to the same pace.

And that would already be a formidable infrastructure challenge if the climate itself were not changing at the same time.

THE HOTTEST AFTERNOON

Consider an extremely hot afternoon. As air conditioners switch on across homes, offices and shops, electricity demand rises. Heat can squeeze the other side of the system too. High temperatures can reduce the carrying capacity of transmission lines and the available capacity of some power plants. The grid



can therefore face higher demand just as some of its capacity is being constrained.

A 2026 Nature Energy study examined what happens when these effects occur together across Western European power systems, combining temperature-driven changes in electricity demand with heat-related constraints on generation and transmission.

Under the grid configurations examined by the researchers, Spain experienced temperature-induced bottlenecks and load shedding while Germany remained comparatively resilient. Across the wider modelling, France, Spain and Italy showed greater load-shedding risk than Germany, the United Kingdom and several northern European systems.

How a system absorbs that pressure depends on more than temperature alone. Storage can provide flexibility. Interconnections can allow electricity to move across borders, but only when neighboring systems have power available and the network has the capacity to deliver it where it is needed. Climate vulnerability, then, is not simply a question of how hot a country becomes. It is also a question of what kind of electricity system that heat encounters.

TURKIYE: THE GRID BEHIND THE TRANSITION

Turkiye is putting electrification at the center of its COP31 agenda.

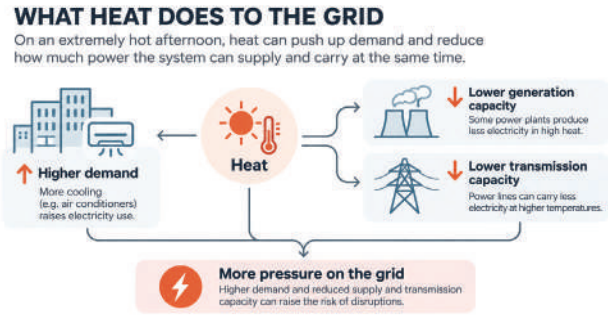
COP31 President Murat Kurum has proposed a global target to increase electricity's share of final energy demand from around 20% today to 35% by 2035.

For Turkiye itself, that push will coincide with a major expansion of renewable power. The country aims to increase its combined wind and solar capacity to 120 GW by 2035, nearly triple current levels.

But the scale matters. Ember calculates that Turkiye needs to add around 8 GW of wind and solar every year to reach 120 GW by 2035. The planned annual YEKA auctions would provide only 2 GW of that.

Other projects therefore need to deliver the remaining capacity, and many are running into the same constraint: the grid.

Some 33 GW of storage-integrated projects have already been allocated, but further allocations have been restricted while those projects remain unfinished.



Turkiye is trying to tackle those bottlenecks. A 2025 legal reform aims to cut renewable permitting times to 18 months, down from as much as four years for wind and two years for solar. Meanwhile, the government reportedly estimates that an additional $28 billion in grid investment will be needed to accommodate 120 GW of wind and solar.

Turkiye is not alone in planning major grid expansion as electricity demand and renewable generation grow. But the scale of new investment raises another question: are the grids being built today being designed for the climate conditions in which they will actually have to operate?

PLANNING FOR A CLIMATE THAT NO LONGER EXISTS

Electricity infrastructure is built to last for decades. Yet many of the assumptions used to decide how much capacity will be needed, where it should be built and how equipment will perform have traditionally been drawn from historical weather.

That becomes a problem when the future no longer resembles the past.

Researchers argue that climate projections need to become part of grid planning itself. Demand forecasts must account for changes driven by both adaptation and mitigation: more cooling as temperatures rise, alongside the electrification of transport, heating and industry. Planning models also need to account for how changing climate conditions affect generation, transmission and distribution, including when several pressures occur at the same time.

A climate-ready grid, then, is not simply one with more transmission lines, storage or generating capacity. Those investments may all be necessary. The deeper shift is in what the system is being designed for.

A grid built for the coming decades cannot be planned around the electricity demand, weather patterns and operating conditions of the decades behind us.

The energy transition is not only a race to build cleaner sources of electricity. It is also a race to build an electricity system capable of carrying that transition through a climate that is changing around it.



RESILIENCE FOR WHOM?

Four workers were killed when a tornado tore apart the containers where they were staying in Antalya. Days before COP31, their deaths pose a simple question: what does climate resilience mean for the people who work, and live on the front line of extreme weather?

The four workers were in the containers when at around 11 p.m. on Oct. 26, a tornado hit a construction site in Antalya's Kepez district. Two containers housing workers were torn apart and a tower crane collapsed. Four workers were killed and another was injured.

A day earlier, Turkiye's General Directorate of Meteorology had warned of locally severe rainfall in Antalya. Among the hazards explicitly listed were flooding, hail and "the risk of tornadoes along the coast." No forecast could have said which construction site a tornado would hit. But the broader risk was there.

Scientists caution against attributing an individual tornado like the one in Kepez directly to climate change. For workers, however, another question comes before attribution.

When dangerous weather is possible, who is responsible for keeping them safe?

WHEN THE WARNING IS NOT ENOUGH

Arzu Cerkezoglu, president of the Confederation of Progressive Trade Unions of Turkiye (DISK), sees the Kepez deaths as part of a much broader change already taking place in working life.

Farm workers continue harvesting in extreme heat. Municipal workers lay asphalt. Construction workers spend their shifts on exposed concrete. Floods, storms and fires increasingly enter places that were designed around yesterday's climate risks.

"Climate crisis is no longer a threat," Cerkezoglu told ANKA31. "It is a reality that di-

rectly affects workers' right to life today."

DISK is calling for the Kepez incident to be investigated in full, including the workers' living conditions, what precautions were taken and whether negligence played a role.

For workers housed at a construction site, exposure does not necessarily end with the shift. In Kepez, that raises questions that have not yet been publicly answered: Did the workers receive the weather warning? Was there a safer place to shelter? Were the containers secured for high winds? Was there a plan to evacuate them?

A criminal investigation is now examining responsibility for the deaths. Four people; two workplace owners, the site manager and an occupational safety specialist were detained. One of the owners and the site manager were later jailed pending trial, while the other two were released under judicial supervision.

WHEN IS IT TOO DANGEROUS TO WORK?

For Cerkezoglu, the problem is not limited to one construction site. Turkiye already has an Occupational Health and Safety Law. DISK argues that Law No. 6331 does not explicitly and comprehensively address the risks emerging from the climate crisis and a changing world of work. The confederation wants climate hazards to become a mandatory part of workplace risk assessments and prevention plans.

Article 13 of the law already provides a right to refrain from work in the face of serious and imminent danger. DISK wants that protection explicitly extended to climate-related emergencies including extreme heat, floods, storms, tornadoes and air-pollution alerts.

Workers exercising that right, Cerkezoglu argues, should not lose wages or risk dismissal. DISK is also calling for binding rules allowing work to be halted during dangerous conditions, particularly in exposed sectors such as construction, agriculture and logistics.

Not every climate hazard requires evacuation. During extreme heat, Cerkezoglu says, measures can be as simple as changing working hours and providing shade, rest and water. But such protections, DISK argues, should not remain recommendations: they should be binding and enforceable.

THE QUESTION KEPEZ LEAVES FOR COP31

From Nov. 9, delegates will gather in Antalya for COP31 and spend two weeks discussing adaptation, resilience and how societies can prepare for a climate that is already changing. Those words can become abstract remarkably quickly.

Resilience can mean a stronger electricity grid. A flood barrier. Heat-resistant infrastructure. A city capable of keeping transport and public services running through an extreme weather event.

But resilience is also about the people standing on the road laying asphalt in the heat, harvesting crops under the sun, delivering packages through a storm or sleeping in temporary

accommodation beside a construction site.

For DISK, that is also what a "just transition" must address. As economies decarbonize, Cerkezoglu argues, workers need protection not only for their jobs and incomes but also a voice in how the transition itself is designed.

A society can build infrastructure capable of surviving harsher weather while leaving some of the people who build and maintain it dangerously exposed. Kepez makes that contradiction difficult to ignore. Four workers went to sleep in their accommodation on a construction site. A tornado struck. Their containers came apart.

Whether specific failures or negligence contributed to their deaths remains a matter for investigation. But Cerkezoglu rejects the idea that the human consequences of a changing climate should simply be accepted as inevitable.

"The consequences of the climate crisis are not unavoidable, and they are certainly not fate," she said. Providing safe working and living conditions and building effective protection against climate risks, she argues, are responsibilities of employers and the state.

As thousands of delegates arrive in Antalya to discuss how the world can become more resilient, Kepez leaves them with a more immediate version of the question: Resilience for w



FROM YEREVAN TO ANTALYA

Two global environmental summits, nine days apart, face a common problem: turning targets into action.

When the U.N. Biodiversity Conference closed in Yerevan on Oct. 31, negotiators left with nearly 50 decisions and a new roadmap for the four years ahead.

They also left with a warning. The first global review of progress under the Kunming-Montreal Global Biodiversity Frame-

work found that the world is off track to meet all 23 of its targets by their 2030 deadline.

YEREVAN'S FIRST PROGRESS CHECK

Adopted in 2022, the Kunming-Montreal framework set a global plan to halt and reverse biodiversity loss by 2030. COP17 provided the first collective review of progress.

The main response was the Yerevan Pathway, which identifies areas for accelerated action over the remaining four years. These include phasing out subsidies and incentives harmful to nature, increasing financial, scientific and technical support for developing countries, aligning national budgets and economic decisions with biodiversity goals, and strengthening monitoring and reporting.

Nearly $2 billion in new biodiversity funding was announced around the conference, according to the Convention on Biological Diversity Secretariat. Initiatives included new financing instruments and improved indicators for monitoring nature.

But the review also identified obstacles standing between those commitments and the 2030 targets: financing gaps, harmful incentives, limited access to technology, data and knowledge, and difficulties translating international goals into decisions across governments and economies.

"The test is not what governments agreed in Yerevan, but what they change when they return home," CBD Executive Secretary Astrid Schomaker said as the conference closed.

NINE DAYS LATER: ANTALYA

Turkiye has presented COP31 as an "implementation COP," with the Antalya meeting intended to focus attention on turning existing climate commitments into action.

The relationship between climate and biodiversity works in both directions. The climate crisis damages ecosystems, while climate action can also affect biodiversity through decisions on land use, energy infrastructure and natural resources.

Both international frameworks recognize this connection. Target 8 of the Kunming-Montreal Global Biodiversity Framework calls for reducing the impact of the climate crisis on biodiversity while ensuring that climate action does not come at nature's expense. The first global stocktake under the Paris Agreement similarly recognized the importance of protecting and restoring nature and ecosystems as part of climate action.

Countries already have separate national plans for climate change and biodiversity. The challenge is to make those plans work together.

In practice, that often does not happen. The global biodiversity review found that climate, biodiversity and disaster-risk policies remain poorly coordinated in many developing countries. Different ministries and institutions may be working on closely related issues without formally coordinating their plans.

As a result, policies designed to achieve one environmental goal can duplicate, conflict with or even undermine work being done elsewhere.

NOT EVERY CLIMATE WIN IS A NATURE WIN

Research on the relationship between climate mitigation and biodiversity conservation cautions against assuming that action on one will necessarily benefit the other. Large-scale solar and wind projects in ecologically sensitive areas can threaten vulnerable species. Mining for minerals needed for the energy transition can create ecological and social pressures. Even afforestation intended to absorb carbon can damage biodiversity if it replaces naturally open ecosystems such as grasslands.

The problem is partly one of scale. The climate benefit of reducing a ton of carbon can be measured globally. Biodiversity is more place-specific: the loss of a wetland, habitat or species cannot necessarily be offset by protecting another somewhere else.

That makes policy coherence more demanding than simply identifying potential "win-wins." Climate and biodiversity policies also need mechanisms to recognize and manage trade-offs when their objectives collide.

The policy architecture is beginning to acknowledge this. Guidance on aligning nationally determined contributions, national adaptation plans and biodiversity strategies calls for proposed actions to be assessed not only for potential co-benefits, but also for whether they could undermine progress toward another environmental objective.

Yerevan highlights the distance that can remain between recognizing these connections internationally and organizing policy around them at home.

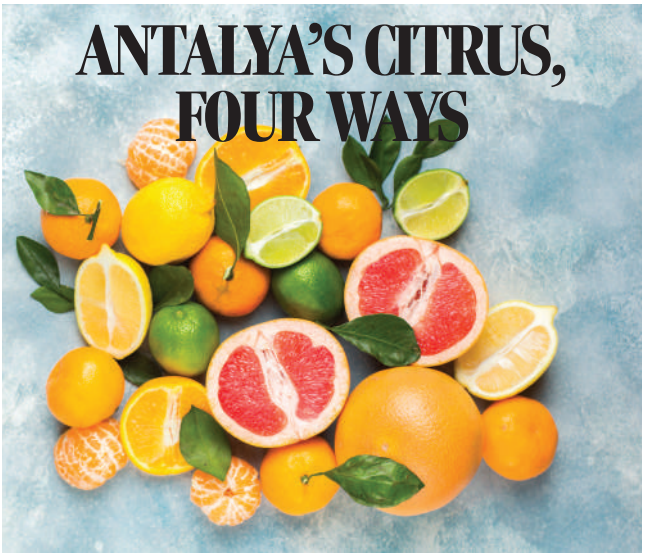
FOLLOW THE MONEY

The biodiversity framework calls for at least $200 billion a year to be mobilized for biodiversity by 2030, including increased international finance for developing countries. The global review found that biodiversity finance is increasing but remains insufficient. It also concluded that the 2025 international finance milestone was likely missed, although complete data are not yet available.

A country may have climate targets, biodiversity targets and detailed plans for both. But none can go far without resources. And if the institutions allocating those resources pursue separate, or sometimes competing, objectives, more finance alone will not guarantee coherent implementation.

For Antalya, the lesson from Yerevan is specific: implementation requires not only more resources, but better coordination in how they are used.

ANTALYA'S CITRUS, FOUR WAYS



In Antalya, citrus is part of the landscape long before it reaches the kitchen. Orange, lemon and bitter orange trees grow across the Mediterranean province, in commercial orchards as well as gardens and along city streets. Antalya accounted for 29% of Turkiye's orange production in 2024, making it the country's largest producing province that year.

But citrus does not have to end up in a fruit bowl or a glass of juice. In Turkish cooking, its peel, juice and acidity have all found other uses, sometimes sweet, sometimes savoury and sometimes intensely sour. Here are four very different ways to put citrus to work.

BITTER ORANGE CHICKEN SOUP

Turunç ekşili tavuk çorbası

The oldest recipe in our quartet takes bitter orange somewhere less expected: into a chicken soup. Found in 16th-century Ottoman cuisine, turunc eksili tavuk corbasi starts with chicken cooked until tender, with the resulting stock forming the base of the dish.

The meat is shredded and returned to the pot with rice, which is cooked until soft. Egg and lemon juice are whisked separately, tempered with a little of the hot stock and stirred into the soup to give it body. The final addition is turunc eksisi, or bitter-orange sour, cutting through the richness of the chicken with a distinctly sharp citrus note.

ANTALYA BERGAMOT PEEL JAM

Antalya bergamot kabuğu reçeli

In this Antalya speciality, the part usually discarded is the point. Bergamot peel jam is one of the province's geographically indicated products, alongside its better-known bitter-orange peel jam.

The process begins with the

peel rather than the flesh. The outer surface is lightly removed and the white pith trimmed away before the peel is cut into strips. Each strip is rolled tightly and threaded onto cotton string, then boiled several times in fresh water to draw out its bitterness. The softened curls are cooked in a syrup of sugar and water until glossy and translucent, with a little lemon juice added towards the end.

BITTER ORANGE SOUR

Turunç ekşisi

No sugar this time. Bitter orange can also be turned into turunc eksisi, a concentrated souring ingredient that puts the fruit's acidity rather than its sweetness to work.

The oranges are squeezed and the juice strained to remove the seeds and pulp before being brought to a gentle boil. Any foam that rises is skimmed away as the juice slowly reduces, becoming darker, thicker and more concentrated. Once it reaches a thick but pourable consistency, it is left to cool and bottled, ready to add a sharp citrus kick to other dishes.

ORANGE-BRAISED CELERIAC

Portakallı kereviz

Here the orange is neither garnish nor dessert. Its juice becomes part of the cooking liquid in a classic olive-oil vegetable dish, bringing sweetness and acidity to the earthy flavour of celeriac.

The celeriac is cut into large pieces and kept in lemon water to prevent browning, while onion is softened in olive oil. Carrot, potato and celeriac are then added, followed by orange and lemon juice, water, bay leaves and a pinch of sugar. The vegetables cook slowly for about 45 minutes, allowing the citrus to become part of the sauce rather than simply flavouring it from above. Once cooled, the dish is finished with fresh orange segments and dill.



PHASELIS:
WHERE THREE HARBOURS MEET THE FOREST

Roman streets descend towards the Mediterranean at this ancient port, where three natural harbours helped turn Phaselis into one of the coast's important trading cities.

Phaselis occupies a small peninsula between the mountains and the Mediterranean, about an hour's drive from Antalya. Pine forest covers much of the site today, with ancient streets, baths, agoras and other public buildings extending towards three sheltered bays.

The geography explains much of the city's history.

Ancient accounts place the foundation of Phaselis around 691/690 BC, under the leadership of settlers from Lindos on Rhodes. Its three natural harbours gave the settlement access to maritime routes connecting Egypt, Phoenicia, the Aegean and Greece, placing Phaselis within a much wider Mediterranean trading network.

Those connections stretched well beyond the surrounding coast. Phaselis was among the Greek cities involved in the Hellenion sanctuary at Naukratis, the major trading settlement in Egypt, while its coins have been found in Egypt, Syria and Rhodes.

The commercial role of its harbours survived for centuries. Phaselis was still listed as a customs port in the first century B.C., when merchants moving goods overseas through its ports were required to declare them to customs officials.

A STREET THROUGH PHASELIS

From the waterfront, the principal street runs through the centre of Phaselis. Around it stand the remains of agoras, baths, a theatre and other public buildings. Much of what visitors see above ground today belongs to the Roman Imperial period, one of the city's most prosperous phases.

Hadrian left a particularly visible mark. The emperor visited the region in the second century A.D., and monumental remains associated with his arrival stand near the southern end of the principal street. An aqueduct carried water into the city, supplying its baths and other civic infrastructure.

But Roman Phaselis was already an old city.

Over the centuries it had moved through Persian and Athenian spheres of influence, welcomed Alexander the Great in 334 B.C.

and later spent a period within the Lycian League. Piracy brought a more violent interruption in the first century B.C., when the Roman commander Publius Servilius Vatia campaigned against Phaselis. By the middle of that century, the city had again been incorporated into Lycia.



FROM STREET TO SEA

Phaselis is compact enough to explore largely on foot. The main street provides an easy route through the ruins, while pine trees shade much of the archaeological area and the three harbour bays are only a short walk apart.

The city began to contract in Late Antiquity. Raids from the late third and early fourth centuries contributed to its decline, while the growing importance of nearby Attaleia (modern Antalya) and environmental changes around the settlement may also have played a role. Stone from Phaselis was eventually reused elsewhere, including in Attaleia.

The city nevertheless survived for centuries as an ecclesiastical centre. It appears as a bishopric of Lycia in medieval records, while later maritime guides increasingly referred to it simply as a harbour. After the Seljuk conquest in 1158, Phaselis largely disappeared from the historical record until its rediscovery in the nineteenth century.

Today, the South Harbor is perhaps the easiest place to understand the geography that shaped Phaselis. The mountains rise immediately behind the coast, while the sheltered bay opens onto the Mediterranean. From the Roman city, it takes only minutes to reach the water, and swimming is possible beside parts of the archaeological site.

That makes Phaselis an unusually easy half-day escape from Antalya: ruins, pine forest and several small beaches occupy the same peninsula. For centuries, ships leaving these harbours connected this small stretch of coast with Rhodes, Egypt, Syria and the wider Mediterranean.

anka/31
A SPECIAL PUBLICATION FOR COP31

EDITORIAL ADVISOR
Yusuf Kanlı

EDITOR-IN-CHEF
Kenan Şener

EDITOR
Narin Diri

COPY-EDITOR
Matt Hanson

DESIGN & LAYOUT
Gökçe Ekin Baran

CONTACT
anka31@ankahaber.net

ANKA NEWS AGENCY
Atatürk Blv. No. 154/B
Çankaya, Ankara, Türkiye