

# Correspondence

## Scale up elephant anti-poaching funds

Many populations of Asian elephants (*Elephas maximus*) have enjoyed 15 years of protection against poachers. We suggest that increasing investment in anti-poaching measures and law enforcement in Africa could help to stem the escalating crisis for African elephants (*Loxodonta africana*).

Since 2010, Africa has received some US\$500 million of international donor funding to increase law enforcement in protected areas ([go.nature.com/2h76smi](http://go.nature.com/2h76smi)). However, poaching is still rife, particularly where rangers are sparse. Even well-resourced parks in southern Africa are not immune.

Poaching of Asian elephants was stamped across Cambodia's Cardamom Rainforest Landscape in 2001, and has been kept at bay at an annual cost of \$200 per square kilometre. Assuming similar factors operate in Africa, and given that the estimated range of the African elephant is 3 million km<sup>2</sup>, on-the-ground action at poaching sites would need some \$600 million annually.

Although daunting, this sum is less than \$1,500 a year for each live African elephant — much lower than even conservative estimates of its value to ecosystem services and ecotourism. The global community must help to raise these funds.

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## Step on the natural gas for German cars

The decision by Germany's Federal Council to phase out petrol and diesel vehicles by 2030 is at odds with the government's investment in renewable energy, which is not enough to produce the extra power that electric cars will need. We show how natural gas could plug the gap.

Replacing internal-combustion vehicles with electric cars would reduce Germany's primary energy needs by 60%, from about 570 terawatt-hours (TWh) to about 230 TWh (detailed calculations available from the authors). However, the government's brake on renewables, mainly to protect stability of the electricity grid, means that only 63 TWh will come online by 2030 (see also *Nature* **534**, 152; 2016). Making up the deficit with electricity generated by burning natural gas would create 131 million tonnes of carbon dioxide, which would still save 30 million tonnes on 2014 road-transport emissions.

To decarbonize its transport sector entirely — and to meet the shortfall under its plan to phase out nuclear energy by 2030 — Germany will need to step up production of renewable energy and develop smart storage grids.  
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## Funds to help Eastern Europe close the gap

The incentive for investigators in Eastern Europe to apply for Horizon 2020 funding from the European Union is undermined by the grant model defining how researchers should be paid ([go.nature.com/2hqxgxi](http://go.nature.com/2hqxgxi)). It requires that research stipends conform to national basic salaries, which are much lower in Eastern than in Western Europe. This weakens the motivation of researchers in the eastern EU to put in the extra effort required to catch up and gain international standing.

Compared with Western European centres, systems for grant writing, funding management and research publication in Eastern Europe are less developed. After years of underfunding, the scientific community there lacks the necessary competitive edge. For researchers who trained abroad, the cushion of having research

and living expenses provided by their principal investigators is no longer available when they return home (*Nature* **538**, 444; 2016).

As young investigators who trained as postdocs in the United States, we are finding it increasingly hard to close the research and salary gap with Western European universities because of the funding challenges in Romania. It is essential for the EU to instigate special funding arrangements for Eastern European countries in the current calls if progress is to be made.

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## Illegal lemur trade grows in Madagascar

We call for urgent action to increase government effectiveness in fighting Madagascar's illegal trade in live lemurs (see [go.nature.com/2i6hvor](http://go.nature.com/2i6hvor)). More funding is needed to investigate the issue, its extent and the factors behind it. Facilities to rehabilitate confiscated lemurs must be improved, and more international non-governmental organizations should contribute.

Exploitation is pushing species such as the ring-tailed lemur (*Lemur catta*) towards extinction in the wild. Thousands of lemurs are kept openly as illegal pets. Touching and feeding the animals is common to encourage tourists, even in protected areas — despite a law forbidding human contact with lemurs in those areas.

Environmental degradation is costing Madagascar up to 10% of its gross domestic product. A sapphire rush last year resulted in 45,000 miners digging in its protected areas. Organized poaching is decimating its sea-turtle populations, and the illegal pet trade is set to wipe out the last 100 wild ploughshare tortoises (*Astrochelys yniphora*).

The country's weak opposition to the illegal export of rosewood may cause it to face new sanctions under the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

It is time for the government to enforce its own laws and put Madagascar's unique heritage above short-term financial gains.  
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## Save last cloud forests in western Andes

Wildfires in November 2016 consumed much of the last relic cloud forests on the western slopes of the Andes in northern Peru, a well-known biodiversity hotspot. Normally protected against fire by mist throughout the year, these forests were suffering from severe drought. Climate change and local human intervention seem to have led to a rapid and massive loss of biodiversity, affecting hundreds of species in a short space of time.

According to the International Union for Conservation of Nature's Red List, several globally threatened animal species, such as the spectacled bear (*Tremarctos ornatus*), live here. The area is a discrete biogeographic region (the Amotape–Huancabamba zone; M. Weigend *Bot. Rev.* **68**, 38–54; 2002) that has an extraordinary concentration of micro-endemic plant species, most of which are restricted to individual cloud-forest remnants of just a few hectares (J. Mutke *et al. Front. Genet.* **5**, 351; 2014).

We call on the scientific community to step up biodiversity monitoring and to devise programmes that will protect these forests in the future.  
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