

Toxic legacy

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What communism left behind

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A mine that failed the acid test

TWICE a symbol of foreign oppression, the disused Czech airfield of Hradcany, a couple of hours' drive from Prague, is now a happily disorganised sort of place. On a recent spring afternoon its concrete expanses, first built by Nazi invaders, attracted a learner-driver bunny-hopping past deserted bunkers that used to hold Soviet fighter jets. On another taxiway a woman on rollerskates led two small girls on bicycles. At weekends, cyclists mingle with kite-flyers and microlight pilots.

The air of subversive freedom is fitting. Since the Velvet Revolution, the image of the Czech Republic's governments has been set by ex-dissidents, not the sleek reformed communists who clung to power in some neighbouring states. The Czechs made a better job than most of opening the archives of their communist-era secret police and trying to keep ex-spooks away from high office (see [article](#)). Prague does not just look as rich as any Western city, it is rich: in terms of GDP per person, it is wealthier than any region of France outside Paris.

And yet here in Hradcany the toxic legacy of communism persists. Under the birch and pine trees of the airfield, black pipes and hoses snake across the sandy soil before disappearing into small well-heads. An oily tang in the air offers a clue: this cheerful place is the site of an environmental disaster caused by Soviet forces.

The occupiers left some 7,000 tonnes of kerosene in the soil around the airbase from where it began draining into a nearby river. Some jet-fuel leaked from shoddy pipework and storage tanks. Other spills were deliberate. Czech workers from the airfield have said that sometimes fuel-supply trains would arrive before the base had room to store more kerosene. When that happened, the newly arrived fuel was poured on the ground.

When the cleanup first began, a well dug anywhere within an area of a dozen hectares (30 acres) around the airstrip would reveal several centimetres of kerosene on top of the natural groundwater. "We

used it as fuel," recalls Jirina Machackova, a scientist working for a company called Earth Tech who has been helping to clean up the site for 11 years. Locals would steal fuel recovered from the cleanup for use in their tractors. The job is due to be finished about 2012, by which time it will have cost the Czech state more than €17m. Even then, the ground will be too contaminated to build on.

By an unhappy coincidence, the Czech Republic's worst ecological disaster lies just a few miles away, at the site of a uranium mine that once supplied the Soviet Union with fuel for warheads. As at Hradcany, the trouble is underground. From 1974 to 1996, Soviet and Czech technicians carried out what they called "chemical mining" for uranium below the town of Straz pod Ralskem. Over the life of the mine, more than 4.3m tonnes of sulphuric acid and other toxic chemicals were pumped deep underground to leach out the uranium. The acid mix was pumped back up and the uranium separated out.

Acid mining is used in the West too, and with the right local geology need not be dangerous, says Ludvik Kaspar, a young engineer from Diamo, a state mining and mine cleanup firm which now runs the site. Unfortunately, he says, this is a terrible place for the method, and communist-era miners botched their work. They injected more acid than they pumped out, so the solution flowed sideways, away from the mine. In theory, a thick layer of rock kept the toxic stew away from an important aquifer, closer to the surface, that provides the region with drinking water. But the miners perforated that protective layer with 15,000 injection wells, causing massive contamination.

Today, Diamo must work night and day, pumping clean water into the ground through a line of wells to form a hydrological barrier that uses water pressure to keep the worst poisons penned in. At the same time the old acid is pumped up for treatment. If Diamo stopped all this pumping, acid waste from the mine would contaminate the North Bohemian Cretaceous Basin, explains Mr Kaspar. Asked who relies on that basin for water, he replies: "For example, Prague."

The poison cannot be sealed off with a physical wall—there is too much of it, too far down. Instead, Diamo must keep pumping, controlling the invisible menace with what EU experts call "dynamic containment" while slowly treating the worst contaminants. Diamo executives say the site should be stabilised by 2035, but it will never be clean: under their plan, more than a million tonnes of contaminants will be left underground.

The twin environmental catastrophes of Hradcany and Straz are a fair metaphor for the legacy of communism. To a tourist or a business traveller, the Czech Republic, Hungary or Latvia, and especially their smart capital cities, may look like any corner of the Western world. But decades of communism left poisons that linger on.

The old system's environmental abuses cannot be separated from other crimes committed in the name of state socialism. The Czech environment minister, Martin Bursik, notes that ecological protests preceded the Velvet Revolution of 1989 as citizens of the industrial "Black Triangle" near Poland and Germany demanded to know what was in their choking air.

The coming of democracy brought a flurry of environmental legislation. But it was the prospect of EU entry that gave such laws teeth, says Ladislav Miko, a Czech environmental official who now works at the European Commission in Brussels. Inspectors could exert pressure on large firms to fit clean technology because it would become mandatory once the country joined the EU. (Many small firms kept old, filthy factories open until EU accession, then declared bankruptcy.) The EU has budgeted €5.78 billion for environmental work in the Czech Republic between 2007 and 2013, but the problems dwarf the sums available.

Much Western media attention has been concentrated on communist-built nuclear power plants. Bulgaria and Slovakia had to promise to shut plants down before joining the EU. Lithuania, which produces 72% of its electricity at a single nuclear power station, must shut it on EU orders by next year. Nuclear power plants are easy to see and fret about, but there are plenty of less visible nasties. Old landfills across the region, for example, could take tens of billions of euros to clean.

Yet there are also some bright spots. Water quality in the new members, except in Hungary, Romania and Bulgaria, is approaching EU standards, says Mr Miko. Four years ago, at the time of the big-bang enlargement, their water quality was "like the West in the 1970s".

Poison of the mind

The picture is just as complex when it comes to ideological legacies. Famously, the sweeping away of old hierarchies was followed by spells of wild capitalism in which too many gains were ill-gotten. Yet those years also saw a big infusion of fresh thinking as clever, often foreign-educated reformists became government ministers at a young age, and still do. In capitals across the region, those young reformists draw very similar conclusions about the legacy of communism.

Corruption is a huge problem, says Henrik Hololei, who used to be Estonia's economics minister and is now a senior Eurocrat in Brussels. "In Soviet times, cheating the state was like freedom-fighting." He points to the contrast between Estonia and Finland, which share very similar histories and cultures. But Finland was spared Soviet occupation and now enjoys top billing, jointly with Denmark, as the least corrupt country on earth, in an index compiled by Transparency International, a pressure group. Estonia comes 28th. "That is a good result for a new member state," says Mr Hololei, "but without the Soviet legacy Estonia might be in the top five."

Mr Bursik, the Czech environment minister, says ex-communist societies not only distrust their elites, they also lack confidence in their own civic strength. A senior official in Warsaw complains that the low quality of the civil service holds his country back, but nobody cares enough to change it. "One of the most popular tabloid stories here is that bureaucrats are paid too much," he sighs. "And of course the opposite is true." The salaries are miserable, he says, and administration wretchedly bad. "There is a lack of recognition in Poland that an efficient civil service is a big benefit."

Such reformers welcome the EU as a source of rules and rigour. But even new EU laws can be subverted by the genius of ex-communist citizens for finding loopholes, says Mr Miko, the environmental official. When transposing EU directives into national laws, local lobbies will often push for some ambiguous wording to be used. "Sometimes you can work out what is behind it: aha, these people want to shoot wolves." Sometimes the effect of a loophole emerges only later.

As in the poisoned soil and water of Hradcany and Straz, communism left mental and political legacies that cannot be walled off. But nor are they safe to be left alone. Dynamic containment will be needed for years to come.