

## India grapples with poisonous legacy

Print

By James Lamont in Ankleshwar

Published: November 12 2008 18:36 | Last updated: November 12 2008 18:36



Ankleshwar is one of the most polluted towns in the world but cleaner technology is helping to control the effluents from its chemical factories

The chemical plants of Ankleshwar are smelled before they are seen. The noxious, sulphurous mix of gases that rise from one of Asia's largest industrial estates catches in the throat, stings the eyes and prickles the skin.

### Slideshow

James Lamont's pictures from Ankleshwar

"It's a cocktail," says C.B. Upasani, of the Jyoti Om Chemical Research Centre as he surveys the shimmering, chimney-lined horizon from the top of a landfill site on the edge of the estate. "But it's the gases you can't smell that are the most dangerous."

Across town, the chemical cluster's disaster prevention team are catching their breath after responding to a 9 tonne ammonia discharge the day before. "It was a big leak," says one of the team.

Ankleshwar, in India's western Gujarat state, is listed by the New York-based Blacksmith Institute as one of the most polluted towns on earth. Its 1,700 factories produce dyes, pigments and pharmaceuticals to supply a global market.

Many of them also produce greenhouse gases and a mix of industrial effluent that only recently found its way into treatment ponds rather than into groundwater.

Among local companies such as Chemcruz Enterprises, Apex Healthcare and United Phosphorus are more familiar names: **Novartis** and **Sanofi Aventis**, the pharmaceutical companies, and **Ciba**

, the chemical company.

The town's record for pollution is a potent symbol of the price of India's industrialisation and fast-paced economic growth. Yet the business leaders of Ankleshwar, with the support of the government and international donors, are belatedly trying to clean up their industrial backyard. Non-governmental organisations and the judiciary have given their consciences a prick, but the carbon credit market is also acting as a financial catalyst for improvement.

The United Nations Industrial Development Organisation, which has encouraged a voluntary response to pollution control, has observed "significant cleaner technology investment in Ankleshwar". "Increasingly, there's progress when we say 'Don't do it for the environment, do it for the bottom line'," says Philippe Scholtes, Unido's regional representative.

An added incentive for investing in clean technology is the sale of carbon credits. A sulphuric acid treatment plant, using technology imported from Canada, and a pharmaceutical company wanting new technology to help cut nitrogen dioxide emissions are among those seeking revenue from carbon credits. Better incineration methods using US plasma technology are also gaining support.

The credits are earned when enterprises in the developing world embrace cleaner technology. For each tonne of greenhouse gas emission avoided, they receive a credit, which they can sell to a company in the developed world to help it reach its own emission targets. On the European spot market, a credit is worth about €20 (\$25, £16) per tonne of carbon dioxide equivalent.

One member of the local business community enthusiastically talks of making Ankleshwar eco-neutral within five to seven years by planting 200,000 saplings.

Ankleshwar sits in a grim pollution peer group with Chernobyl, the site of the world's worst nuclear disaster in 1986, and Bhopal, India, where a chemical leak in 1984 injured tens of thousands of people.

For about 40 years, Ankleshwar suffered unchecked industrial pollution as it helped Gujarat become one of India's most industrialised states, producing about 16 per cent of the country's manufacturing output. A blind eye was turned to the disposal of heavy metals and chemicals on an estate generating about 250m litres a day of effluent and 50,000 tonnes of solid waste a year.

The destination of solid waste before the landfill site was commissioned eight years ago is a mystery. "[Its location] is a difficult question," says Atul Buch, president of Ankleshwar Industries Association. "There was unauthorised dumping."

It was the same for liquids. A stream running through the town and into the fields beyond still runs brown with chemical effluent. Close by lies a large slum where naked children scoop cups from an open gully beside mud shacks.

Dr Santosh Zacharias, senior doctor at the local hospital, supported by the business community, puts workers on leave for high phosphorus levels in their blood. But he insists the population is not being poisoned. "There has been no pollution related cancers or respiratory disease and I've been here for 12 years."

### Concern at early Delhi 'fog'

When hundreds of delegates to the World Economic Forum's India summit arrive in Delhi this weekend, one of the first things that will strike them about India's fast-growing economy is the low-lying soup that hangs over the capital city.

Campaigners are concerned that the winter "fog" in Delhi, ranked as the world's most polluted international city by the World Bank, has come earlier this year.

By some estimates this week, sulphur dioxide and carbon monoxide levels have been well over safe levels.

The Central Pollution Control Board in Delhi said that sulphur dioxide and carbon monoxide levels had fallen considerably over the past eight years, although the latter remains above the prescribed standard. However, it had registered a rise in particulate matter (dust), which it put down to construction work for the Commonwealth Games and Delhi metro.

The capital is estimated to have 5.5m cars on its roads, an increase of 57 per cent over eight years.

The landfill, the highest point for miles, is the most visible symbol of a more responsible attitude. An effluent treatment plant, opened two years ago, pumps waste out to sea. But capacity is stretched.

The carbon market may put right some of the problems overlooked in the rush to industrialise. But local executives are relying on their children to take on what they have started.

“The next generation is taking a lot of interest [in the environment],” P.N Parameswaran, vice president of United Phosphorus, says.

[Copyright](#) The Financial Times Limited 2008

"FT" and "Financial Times" are trademarks of the Financial Times. [Privacy policy](#) | [Terms](#)  
© Copyright The Financial Times Ltd 2008.