Night falls early in the flat landscape outside Raipur, the capital of India’s Chhattisgarh state. Towering above the dry rice fields, factory after factory producing sponge iron for export to China pumps out smoke that dims the setting sun and blackens trees, soil and workers’ faces alike.

Welcome to the frontier of the global ‘carbon offset’ market. Here, as in hundreds of other locations around the world, polluting private companies are setting up new ‘profit centres’ to capture green finance. In return for documents claiming that they are cleaning up part of their operations, industries such as Chhattisgarh’s crude iron works hope to sell carbon credits to Europeans, Japanese or North Americans bent on compensating for some of the CO$_2$ emissions of their factories and cars.

But to many Indian activists, the Chhattisgarh iron magnates’ plans look like little more than opportunism on the part of a dirty and exploitative industry. With or without efficiency improvements, Chhattisgarh’s largely coal-fired iron works will continue to spoil farmland and crops, displace villagers, deplete and contaminate water reserves and damage the health of local residents. In December, closure orders were slapped on several of the plants for pollution violations. Out of fear for their livelihoods, residents of one affected local village, Charenga, have even resorted to vigilante action to block company access to a recently-built factory nearby. Today the plant lies idle.

Such conflicts may come as a surprise to idealists convinced that carbon offset projects – whether set up under the auspices of the Kyoto Protocol’s Clean Development Mechanism (CDM) or under voluntary private schemes – will bankroll community-friendly renewable energy and set the South on a low-carbon path to industrialization. But the Chhattisgarh case is hardly exceptional:

- In Minas Gerais, Brazil, farmers, trade unions, churches and rights organizations are incensed about a land-grabbing plantation and pig iron firm that has tried to peddle credits on the ground that without carbon offset finance it would have to replace its charcoal fuel with mineral coal.
- On Ecuador’s high plains, peasants complain bitterly about the financial losses they suffered after signing a contract to maintain tree plantations designed to offset carbon dioxide emissions from a coal-fired power station in The Netherlands.
- In South Africa, the giant chemicals, mining and fuels corporation Sasol has stirred controversy by arguing that it should be able to sell carbon credits for a natural gas pipeline that its own executives admit has already been paid for as part of the company’s normal expansion.
- In Maharashtra, India, wind farms are stirring controversy by taking over land needed by local people.
• Around Mount Elgon in Uganda, villagers are being beaten and shot at by authorities attempting to keep them out of a national park, part of which is now a carbon plantation aimed at exporting credits to Europe.

A quick look at market fundamentals suggests why such conflicts are almost inevitable. The biggest offset buyers want cheap carbon credits, and lots of them. The most reliable providers will be big, highly-capitalised firms or agencies in a position to hire carbon consultants and accountants, liase with officials or pay the fees needed for UN registration.

Carbon-saving schemes that take the trouble to respect community rights, on the other hand, tend to be fiddly, expensive, low-yield, or difficult to implement politically. Revealingly, only around 2 per cent of carbon credits from registered CDM projects are generated by renewable energy projects, while over two-thirds come from big installations that destroy industrial gases or burn methane from waste dumps or coal mines.

Against this market logic, well-meaning schemes like the CDM Gold Standard – developed by the World Wide Fund for Nature and other organisations to promote carbon offset projects that foster ‘sustainable development’ – have little chance. As a RaboBank executive recently observed, ‘Few in this market can deal with communities.’

Where does that leave corporations who want to be seen taking a responsible approach to global warming? One answer is obvious: abandon carbon offsets and help push for structural, long-term changes that can actually be effective in keeping coal, oil and gas in the ground. Shifting subsidies away from fossil fuels, supporting communities defending their lands against carbon extraction, investing in low carbon energy and transport systems, and instituting tougher regulation on pollution are all necessary steps to a carbon-free future.