Welcome to ArcelorMittal, Europe's top steel manufacturer.

Lakshmi Mittal
CEO
Like other industries of its type, ArcelorMittal depends on both cheap minerals and cheap labour.
Yet, like other industries, ArcelorMittal has discovered that many of the activities of the earth in which it has never previously taken an interest are now also important for its operations.

*For example ...*
Small farmers' care for the earth ...
... as well as the incessant activities of non-human beings ...
¿Why is ArcelorMittal suddenly interested in these sorts of activity?

One reason is that social protest and other problems have forced European states to establish new environmental regulations.
But under neoliberalism, this regulation has taken a peculiar form.
European states have not forced ArcelorMittal to stop polluting … nor even made pollution beyond a certain level necessarily a crime.
Instead, the European Union has unilaterally appropriated, for its industries, a certain number of units of permission to use the activities of the entire earth and its peoples to clean up or justify the operations of those industries …

… and then has limited the number of those units.
The EU grants these units to European states ... who then pass on these units to industries such as ArcelorMittal.

“Here you go! You can use this part of the planet to clean up your operations. But – you aren't going to get any more!”

“And you guys over there can use this fraction of the earth to compensate for the damage you cause.”
If ArcelorMittal doesn’t have enough of these units to cover its pollution, it can buy more … and can continue to pollute at the same level.

Or, if European states have given the company more units than it needs, it can sell the surplus.
“The objective is to transform environmental regulation into tradable instruments.”

Pedro Moura Costa
Bolsa Verde, Rio de Janeiro
So, in addition to subsidizing mineral extraction and the exploitation of labour, EU states give ArcelorMittal property rights in the form of units representing various activities of both human and nonhuman beings throughout the world.
Lakshmi Mittal is thus not only part-owner of the Queens Park Rangers football club, but also – by international law – of a tiny part of the activities of each of the world's small farmers as well as the activity of each little potted plant in each of the world's living rooms ... in the sense that he can make money from the sale of those activities.
Every year, ArcelorMittal makes millions from selling and speculating with tokens representing these human and extra-human activities.
Estimated market value of ArcelorMittal's holdings in assets in carbon-absorption services granted to the company free of charge by EU governments.

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>$1.885 billion</td>
</tr>
<tr>
<td>2013</td>
<td>$529 million</td>
</tr>
</tbody>
</table>
What does ArcelorMittal use all this free money for? Naturally, for expanding its extraction of minerals and exploitation of labour.
Although the assets in environmental services provided free to the industrial sector by European states permit it to continue accumulating capital more or less as normal, the competitive dynamic of capital …

… force industries continually to seek new low-cost environmental services, with the aim of gaining an advantage over competitors in the evasion of environmental regulation.
Figure 22: Historical unit prices in the EU ETS (front-December futures contracts).
By the nature of capital, there will never be a day when the production of environmental services is considered “sufficient” or “efficient enough”.
Hence it is unsurprising that international law now allows states and corporations to enter into contracts with entities in specific places in order to obtain additional units of environmental services that will allow them to continue to contaminate or damage the earth.
Free, monetizable access to human and extra-human activities ...
Free, monetizable access to human and extra-human activities … … plus purchase of services from individual locations.
This is the hope of Ecuador's SocioBosque Programme. Ecuador's government:

"... is now looking to diversify the sources of funding for the programme, including ... payments by industry as a compensatory condition for obtaining licences for extractive and other high-impact activities (to eventually contribute up to 40% of SocioBosque’s budget)."

Climate & Development Knowledge Network, 2012
Some critics who hope that SocioBosque can be "reformed" hold that:

“SocioBosque should include clauses that prohibit extractive activities.”

But in reality SocioBosque, when it becomes a producer of tradable environmental services, will never be able to dissociate itself from extraction. Even if it prohibited extractive activities in SocioBosque territories themselves (which it does not do), SocioBosque, will continue, unavoidably, to be linked to the global extractive economy.
After all, who is buying these products?

- Right to be exempt from laws forbidding you from emitting 1 tonne of CO₂
- Right to ignore laws forbidding you from building on biodiverse site X
- Compensation for industrial groundwater extraction
And this is why pollution-affected communities tend to be concerned about environmental services markets.

“The California Environmental Justice Movement stands with communities around the world in opposition . . .”

Marta Arguello, Angela Johnson-Meszaros and others at CEJM
“Indigenous Peoples who participate in carbon trading are giving [oil companies] a bullet to kill my people.”

Casey Camp-Horinek, Ponca indigenous nation, US
However, what is not yet clear is exactly what it means for companies such as ArcelorMittal (and neoliberal states) to create and take possession of those things called environmental services. ... This is a new problem for political theory (including Marxism), property law, and the study of culture.
Is it that ArcelorMittal owns the bodies of farmers? *Of course not.*
Is it that ArcelorMittal is the owner of the rivers that produce environmental services for it? Again, clearly not.
"Buyers [of environmental service certificates] are **not** owners of the land, the trees, anything.. They pay only for the service."

Steve Zwick
Ecosystem Marketplace
But maybe ArcelorMittal is somehow the owner of part of the labour time of the world's small farmers? And perhaps too of the "labour time" of the rivers?

* A difficult question … *
For example, is the portion of the activity of small farmers around the world that the EU has “given” free of charge to ArcelorMittal to be counted as wage labour? Or is anyone paying wages to the rivers? *Of course not.*
At the same time, Ecuador's Ministry of Environment does say that:

... and the Ministry needs to “discipline” this labour in much the same way that factory owners discipline their workers, in order to manufacture the particular “nature” of environmental services that is desired by customers: e.g., no burning allowed, no cutting of trees, no alterations in the soil, and the inhabitants of SocioBosque territories may have to accustom themselves to oil exploitation too.
This is not only a capitalist way of organizing the activities of “nature” (including the activities of human beings). It is also a *financialized* way of organizing those activities. One example comes from the US.

In the US, as elsewhere, there exist financial institutions called private equity funds. One type of private equity fund is the Timber Investment Management Organization (TIMO). As noted by Kelly Kay, TIMOs sometimes organize their territories as follows …
<table>
<thead>
<tr>
<th>Components of Value</th>
<th>Real Estate Development</th>
<th>Parcelization/fragmentation</th>
<th>Water rights</th>
<th>Recreational rights</th>
<th>Minerals, oil, gas</th>
<th>Ecosystem services</th>
<th>Timber practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subdivision</td>
<td>Sale of land for primary or secondary housing. Development of cottages, lodges, etc.</td>
<td>Sale of smaller (retail) parcels</td>
<td>Sale of water to cities</td>
<td>Private recreation such as exclusive hunting</td>
<td>Drilling/mining</td>
<td>Public water supply watersheds</td>
<td>Special management areas (SMAs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sale of bottled water</td>
<td></td>
<td></td>
<td>Carbon sequestration</td>
<td>Management plan approved by easement holder</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Wetland mitigation</td>
<td>No cut zones</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Species-specific mitigation</td>
<td>Certifications</td>
</tr>
</tbody>
</table>

Thus the activity of human beings in a territory exporting environmental services sometimes appears directed at the production of commodities …
1 tonne Kraft Eucalyptus Pulp

But ...
Environmental services are not real commodities, whose production leads to an increase in the quantity of capitalist value in circulation. Rather, they allow imperialist states to extract a species of rent.

“On Climate Rent”, *Historical Materialism*, December 2014
So maybe what environmental services represent is a new type of capitalist “territory” for whose use its “owners” are able to charge rent.

Maybe the developers of ecosystem services are like the big landowners of a previous era of capitalism.
Just as, 400 years ago, big landowners made their land "rentable" through the application of certain kinds of discipline, fragmentation, measurement, science and land law …
… so too, today's developers of environmental services make a new kind of “territory” rentable through new disciplines and laws. Much more than the old techniques, however, the new disciplines are necessarily concentrated on constant and ongoing surveillance.
Much capitalist territory of the last few centuries has been designed to mass-produce certain “units” that are abstract, measurable, isolable, transportable and widely reproducible in a capitalist economy – for example, commercial grain or livestock varieties.
The new capitalist territory (or capitalist nature) of *ecosystem services* (including its human inhabitants) is designed to produce new elements that are, similarly, isolable, measurable, transportable, reproducible – and in some senses, even more abstract.

**Ecosystem Service Credit Stacking**

- **Credit Stacking** –
  - multiple payments for different ecosystem services from the same parcel of land.

- **Credit Bundling** –
  - a single payment for multiple ecosystem services.
  - not intended to be the sum of individual ES values.

- Stacking GHG and WQ credits should incentivize greater production of ES credits.
In addition to the *species* studied and exploited during earlier epochs of European colonialism ...

... the new territory of ecosystem services is designed to produce strange new entities called “*species-equivalents.*”
Similarly, the new nature of “environmental services” is not only a territory that includes forests …
… but also a territory that includes strange new beings called “forest substitutes.”
In addition to various capitalist raw materials (often identifiable via molecular formulas) …

... the new “territory” of environmental services is designed to produce bizarre new entities called *molecule-equivalents*.

\[333 \text{ CO}_2/8.8 \text{ CH}_4/1 \text{ NO}_2/0.06 \text{ CFC-11}\]
\[ \text{CH}_4 = \]
Another very odd equation required by ecosystem service markets is the following:

The consequences of the events of counterfactual history are calculable with a certainty and precision commensurate with those attaching to the events of actual history.

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**Daily News Extra**

JFK ESCAPES ASSASSINATION, FIRST LADY ALSO OK!

Johnson Sworn as President; Leftist Jailed as Slayer
For example, to calculate the quantity of carbon dioxide emissions “saved” by a REDD project, consultants must compare precisely the quantity of forest carbon actually existing with the quantity that “would have existed” if the project had never been implemented.
Thus, in the new “nature” of ecosystem services, the future of farmers and forest inhabitants – together with that of everyone else who affects forests – is as certain as their past …
… except for businesses, consultants and others who create REDD credits. These are the only people who are treated as having the sovereign power to make decisions that can affect the future of forests.
In the world of REDD, therefore, the behaviour of farmers and forest dwellers is predictable in the way that the behaviour of \textit{objects} or the course of imaginary deterministic “economic processes” are predictable. \textit{Rich financiers of REDD projects, on the other hand, are methodologically treated as having free will and as in control of their own destiny.}
The time in which forest dwellers live

The time in which REDD project developers live
This is obviously a *colonialist* conception ... yet it is a technical requirement for the accounting procedures of ecosystem service markets.
Of course, this is not the colonialism of the conquistadores.
Instead, it is a colonialism of international treaties and governmental agreements ...
... combined with modern military violencea ...
Better climate = reduction in CO\textsubscript{2} emissions
Stopping flow of CO\textsubscript{2} from place A = stopping flow of CO\textsubscript{2} from place B
Stopping flow of CO\textsubscript{2} using technology A = stopping flow of CO\textsubscript{2} using technology B
Fossil CO\textsubscript{2} = biotic CO\textsubscript{2}
\[ \text{CH}_4 = 21 \times \text{CO}_2 \]
\[ \text{N}_2\text{O} = 310 \times \text{CO}_2 \]
Regulated reduction to \( p \) = right to emit to \( p \)
Reduction through regulation = issuing fewer tradeable rights
Reduction = offset
Actual CO\textsubscript{2} reduction = counterfactual CO\textsubscript{2} reduction

... and the work of thousands of economists, technicians, scientists, lawyers and consultants ...
And this is not the only colonialist characteristic of ecosystem service markets. Others include:

1. The main beneficiaries of ecosystem service markets are the old colonial powers. For example, under the Kyoto Protocol, Germany, France, the UK, Spain, Belgium and their industries receive free tradeable units of the earth's self-cleaning capacity. Countries like Nigeria and Ecuador get none.
2. Environmental services markets are possible only through a powerful state-corporate fusion not all that much different from that which characterized the old East India Company of the UK or the VOC of The Netherlands.
3. The “nature” of environmental services is not a plurinational nature. Rather, it is a nature constructed on top of the nature of “resources” and of militarized “conservation” that originated in the colonial era.
4. As in traditional colonialism, environmental services continually reproduce racism via the mechanisms of capitalist competition. Do you want cheaper carbon or biodiversity credits? Then you have to demonstrate that without your financial support, somebody will destroy the forest. There thus exists an economic incentive to create more and more threats from the obvious sources: oppressed groups.
“… a nightmare of indigenous people destroying the forest becomes more valuable as it becomes more nightmarish, with an added caveat: the international money will not arrive unless you act to make the nightmare go away” by changing what indigenous peoples do.
The struggle against this new colonialism is not undertaken only at the moment when a community has to decide whether to sign an agreement to help provide environmental services. It begins to be waged beforehand and continues long afterward, not only among those who refuse but also among those who sign. *Analogy:* dispossessed peoples who have to accept wage labour do not cease to contend with and even struggle against capital through whatever strategies are at hand.
WORK TO RULE

Sorry, mate. I checked with the union and they said moving bikes is not one of my authorised tasks. Work around it, they said.
... Whatever happens, the struggle is bound to continue.