

## Technology&Resources Good things come to an End

We have received and are pleased to publish... Ascanio Vitale wants to change the balance between Nature and Business. In favour of the former

## by Ascanio Vitale

According to the environmental NGO, specialises in analysing the ecological footprint of human activity on the planet – August 20 was Earth Overshoot Day for 2013. This calculation establishes the number of days it takes humanity to use up all the resources the planet can regenerate in any given year, according to sustainability criteria. The first calculation dates back to 1987, when Earth Overshoot Day fell on December 19. The world's constant demographic

growth, along with the access many economies in transition now have to more energy-guzzling lifestyles, both in South East Asia and South America, has led to a fast acceleration in the exploitation of the planet's natural resources and energy supplies, mainly by manufacturing industries with an intensive use of raw materials and the energy sector. Globalisation and indiscriminate industrial expansion have proliferated in the absence of a regulatory framework that might help to contain the growing

thirst for energy and discourage industrial models with a high environmental impact. The current supply chain for products involves production cycles that are unsustainable for the delicate balance of the planet's ecosystem and the trend of offshore manufacturing has led to a drastic increase in the distance now travelled by semi-processed goods. The most crucial challenge for the human race continues to be ignored in the name of nationalist interests and emergencies that are essentially the outcome of wrong choices made in the past. The global emergency connected to climate change and the depletion of resources requires immediate action, particularly by those countries with the greatest industrial activity and the technological and regulatory



tools best suited for the purpose. Countries such as Saudi Arabia, the United Arab Emirates, Qatar, Oman and Kuwait have recently engaged in a programme to expand their renewable energy plants, worth over 75 billion dollars (55 billion euros). The aim is to reduce the excessive toll internal demand is taking on their energy resources, now requiring more than 35% of these countries' annual oil production.

However, these efforts are still essentially improvised and unilateral, a far cry from the kind of systematic review of all global technological and production methods that is actually called for. The result of international agreements on climate change currently overseen by the United Nations Framework Convention on Climate Change (UNFCCC) – highlights the failure of this approach, which merely tries to put a patch on the problems caused by climate change, instead of promoting the kind of investments needed to start to decarbonise energy and manufacturing cvcles.

The world's major powers such as China, the US and Russia - responsible for twothirds of global environmental damage continue to authorise the extraction of further fossil fuels and non-conventional raw materials, even in as-yet uncontaminated areas of our planet. The recent go-ahead granted by the Russian and Norwegian authorities for exploration activities in the Arctic by companies like Shell, Gazprom, Exxon Mobil and the omnipresent Russian operator, Rosneft, could seriously compromise the survival of areas on the planet that are essential to the entire marine food web. For example, the



installation of an oil platform in a location like the ice-free part of the Barents Sea – a joint Eni-Rosneft project - means operating for at least four months a year without any sunlight at all, battered by waves at least 20 feet high. These conditions would make any kind of capping mission in the event of oil leaks extremely hazardous, particularly in the light of the tragic example of the Deep Water Horizon disaster. As things stand the Russian mining industry spills 30 million barrels of oil into the ground a year, the equivalent of seven Gulf of Mexico incidents. There are close to twenty thousand single accidents a year in the Russian oil industry alone, with Rosneft being responsible for almost half of them. And the search for and mining of precious minerals and metals does similar damage. Once again, the UN's attitude is driven by a purely economic analysis of the market, sidelining all environmental questions and avoiding any quantitative evaluation of possible externalities that can have a bearing on technological choices and extraction costs. What is needed is a Carbon Tax to

An explosion along a pipeline in a village in San Martin Texmelucan in Mexico.

redress the balance between nature and business and new ways of assessing social and environmental damage caused by production and mining activities. Virtuous examples include the sustainable supply chain governance systems introduced by Scandinavian countries, Ireland or the Netherlands. They prove it is actually possible to implement a system which, despite complying with the guidelines of western manufacturing markets, is nonetheless able to explicitly calculate the environmental impact of industrial activities.

Internalising certain environmental costs into company accounts and allowing the market to reward virtuous firms, would be a first major step towards promoting the transition to an environmentally sustainable economy.

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