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News Release
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The Big Down: **Technologies Converging at the Nano-scale**

The ETC Group (formerly known as RAFI) today announces the publication of ***The Big Down: Atomtech – Technologies Converging at the Nano-scale***, the first comprehensive and critical analysis of nanotechnology for civil society and policymakers. The 80-page report seeks to widen civil society's and policymakers' focus beyond biotech and genetically engineered crops, and to catalyze widespread public debate on the societal impacts of nanotechnology.

The ability of scientists to modify matter is taking a giant step *down* – from genes to atoms – explains ETC Group. While society is mired in acrimonious debates on the promises and perils of genetic modification, industrial enterprises are harnessing an atomic engineering revolution that could modify *all* matter – both living and non-living -- and transform every aspect of work and life.

Nanotechnology refers to the manipulation of atoms and molecules at the level of the nanometer, one billionth of a meter. It is at this scale that quantum physics takes over from classical physics and the properties of elements change character in novel and unpredictable ways. ETC Group prefers the more descriptive term “Atomtechnology” because the manipulation of matter will not stop at the nano-scale. Atomtechnology refers to a spectrum of new technologies that operate at the nano-scale and below – that is, the manipulation of molecules, atoms and sub-atomic particles to create new products.

“The world’s most powerful emerging technology is developing in an almost-total political and regulatory vacuum,” says Pat Mooney, Executive Director of ETC Group. “Public and private research at the nano-scale is evolving beneath the radar screen of civil society and government regulators.” Because nano-scale technologies can be applied to virtually every industrial sector, explains ETC Group, no regulatory body is taking the lead. And because many of its products are nano-sized versions of conventional compounds, regulatory scrutiny has been deemed unnecessary.

Atomtechnology is well on its way to creating an economic and social revolution expected to be worth US\$1 trillion by 2015. Virtually all sectors of the economy will be affected. *The Big Down* addresses the hard questions: Who will control nanotechnology? Who will determine the research agenda and who will benefit from nano-scale technologies? How can governments and civil society begin to address the potential socio-economic, environmental and health impacts of nanotechnology without discouraging the safe exploration of its beneficial possibilities?

“Understanding and oversight by civil society and governments is urgently needed,” warns Hope Shand, Research Director of ETC Group, “The products of nano-scale technologies are already

being rushed to market without transparent and democratic processes of review, assessment and regulation.” The ETC Group proposes that governments declare an immediate moratorium on commercial production of new nanomaterials and launch a transparent global process for evaluating the socio-economic, health and environmental implications of the technology.

In 2002, public and private funding for basic nano-scale research was approximately \$4 billion worldwide. Over 30 national governments have launched nanoscience initiatives, and more will follow. An impressive range of Fortune 500 companies is beefing up in-house R&D related to Atomtech, entrepreneurs are launching start-ups and venture capitalists are signaling interest. The number of nano-related scientific articles and nano-related patents is surging.

“By 2005,” states Jim Thomas, ETC Group Programme Manager, “Atomtech will attract more interest and controversy than biotech. By 2010, nano-scale technologies will be the determining factor to profitability in virtually every sector of industrial economies, and by 2015, the controllers of Atomtechnology will be the ruling force in the world economy,” said Thomas.

The release of *The Big Down* is the first in a series of events planned throughout the year. *The Big Down* made its international debut at the World Social Forum in Porto Alegre, Brazil (January 23-27). ETC Group’s Executive Director, Pat Roy Mooney, and Programme Manager, Silvia Ribeiro, spoke at the global event. Over 100,000 civil society activists attended the 5-day event. In Brazil, ETC Group met with the Brazilian Ministers of Science & Technology and the Environment to discuss nano-scale technologies. At the end of February, Pat Mooney will speak to Indian Parliamentarians in New Delhi.

In mid-June, ETC Group will co-host a conference in the European Parliament in Brussels for media and policymakers to examine some of the issues raised by Atomtechnology – this in conjunction with the European Green Party, the Dag Hammarskjöld Foundation, Greenpeace and Genewatch.

The complete text of *The Big Down* is available on the ETC Group website, and hard copies are available for US\$10.00. Contact etc@etcgroup.org for more information.

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The Action Group on Erosion, Technology and Concentration, ETC Group (pronounced *et cetera* group), is dedicated to the conservation and sustainable advancement of cultural and ecological diversity and human rights. To this end, ETC Group supports socially responsible developments in technologies useful to the poor and marginalized and it addresses governance issues affecting the international community. We also monitor the ownership and control of technologies, and the consolidation of corporate power. www.etcgroup.org