INTRODUCTION

Policy problem
While investments in extractive activities in Latin America and the Caribbean (LAC) are booming, there are growing concerns about their social and environmental consequences. Extractive activities, which include metal mining, the extraction of fossil fuels, hydroelectricity and biomass, are expanding and moving into more remote areas that are often inhabited by indigenous and peasant communities. These activities have far-reaching consequences. On the one hand, they generate economic development, jobs, infrastructure and government revenues that partly pay for social programs. On the other hand, they often bring damage to nature and local livelihoods, require large volumes of energy and water, and produce large amounts of waste. Many local communities claim that their needs and their concerns about these negative effects of extractive activities are being neglected, and resistance is mounting. Existing regulatory and institutional frameworks, including consultation mechanisms, are unable to prevent and solve these problems.

Key recommendation
Various studies show that local social and environmental concerns need to be genuinely taken into account in decision-making processes on extractive activities in LAC. Local communities are the most directly impacted by mining as well as by oil and gas exploration, hydroelectric dams and new forms of biomass extraction (oil palm and soybean plantations). They also have extensive knowledge of the natural resources that are affected by these activities. National policy-makers, foreign investors, importing countries and international organisations have to seriously involve local communities in decision-making, in order to reach sustainable and equitable development.

Risk
Unless local voices are genuinely included, and institutional and technical practices are improved, extractive activities will lead to more tensions, which may result in violent clashes. Extractive activities are susceptible to creating conflicts, especially if local community calls for meaningful participation are not properly addressed. Inclusive democratic measures are necessary to prevent this from happening.
KEY OBSERVATIONS

Expanding Material Outflows

Export trends
Global economic growth and the commodity boom have increased the demand for LAC’s minerals and hydrocarbons. Since 2007, the prices for metals and crude oil have on average been three times as high as at the beginning of the century. Regional extraction and exports have widely expanded. In the 2000s, the value of mining exports quadrupled or quintupled for countries like Colombia, Ecuador and Chile, and even increased more than ten times for Brazil, Peru and Bolivia.

Material flows
The Material Flow Analysis (MFA) is a method to study the material units that are extracted, consumed, exported and imported in a national economy. By calculating the volumes of renewable and non-renewable materials that circulate in an economy, the MFA provides a ‘picture’ of the intensity of natural resource extraction and use. Such studies show that the extraction of fossil fuels, metal ores, industrial and construction minerals, and biomass in LAC has rapidly increased. In 1970, the total extraction of materials in LAC was 2.3 billion tons, in 1980, 3.5 billion tons, and in 1990, 4.3 billion tons. In the period 2000-2008, regional extraction rose from 6.1 to 8.3 billion tons (a 36% increase).

National tendencies
While national material flow accounts are current in a region like Europe, only a few studies are available for LAC countries. The available country analyses point at relevant tendencies. In Argentina (see Figure 1), for example, after a relatively steady phase of yearly extraction of around 400 million tons of material from 1970 to 1997, from 1998 to 2008 this increased to almost 700 million tons. In Ecuador (see Figure 2), yearly material extraction tripled from 30 million tons in 1970 to 105 tons in 1996, and after a dip it rose to 118 million tons in 2006. More national and subnational MFA studies are required in order to deepen our knowledge of extractive trends in LAC and their relation with the increased number of socio-environmental conflicts.
Environmental, social and institutional problems

Research points out that the current intensification of extractive activities in Latin America and the Caribbean is environmentally and socially unsustainable. Extraction of metals, fossil fuels and some forms of biomass can have major implications: contamination of soil, water and air, deforestation, the use of large amounts of water and energy, and rapid migration and urbanisation. While the extractive industries’ water consumption competes with the needs of local farmers, its energy consumption and deforestation add to the emission of greenhouse gases. Moreover, throughout the region, areas can be found that are destroyed by mining and oil drilling. Affected groups usually consist of poor and vulnerable people, mainly indigenous and peasant communities. Such environmental liabilities only occasionally come to the surface, as with the Chevron-Texaco case in Ecuador.

Weak institutional frameworks

LAC countries have developed environmental institutions, norms and legislation, and systems for consultation and environmental impact assessment (EIA). Nevertheless, research reveals that in many cases this institutional framework fails to work properly due to low technical quality of EIAs and a lack of appropriate standards and implementation of participation mechanisms (including Convention 169 of ILO). Current national efforts to evaluate and prevent or remediate negative environmental and social effects of extractive activities are insufficient. In general, national economic growth and public sector revenues are prioritised while local costs and environmental monitoring tend to be neglected. There is also a gap between good intentions and real efforts. Interviews with high government officials and mining company managers in Argentina, Chile and Ecuador show that both governments and companies are conscious of the environmental effects of mining and the need for an efficient and sustainable use of water and energy. Yet while governments and companies promote ‘best practices’, the latter are often not adopted.

Rising resistance and bottom-up consultations

Over the past ten years, a growing number of communities in LAC countries are contesting extractive activities. This trend shows from several systematised overviews and databases fostered by activists (e.g. Latin American Observatory of Mining Conflicts) and academics (including the EC-FP7 funded projects ENGOV and EJOLT). These overviews are important because they depict the local contestations that usually remain unnoticed unless they result in violence that attracts media attention. Most conflicts, however, involve peaceful groups, with women often in the lead. These citizens have legitimate concerns about the ways in which extractive projects are being decided upon and executed. Still, they are often verbally attacked, threatened or even criminalised by proponents of these projects, including by politicians.

Bottom-up consultations are a new trend in peaceful local contestation of extractive projects in LAC (see Table 1). These consultations are in most cases formal, organised within the framework of municipal regulations, using official voters’ lists or procedures prescribed by the ILO Convention 169 for indigenous communities. This started in 2002, in Tambogrande (Piura, Peru), with a consultation in which 94% of the participants voted against the start of a large gold mine in their municipality. This new type of consultations indicates that
many local communities are not happy with the current extractive practices and with the institutional arrangements. Firstly, the high percentages of attendance and votes against mining point at widespread discontent with mining activities. This does not necessarily imply an absolute condemnation of any mining, but a repudiation of the dominant approach towards metal ore extraction, often because of the impact on water availability and quality. Secondly, the trend of communities organising their own consultations implies that they have little faith in consultations organised by government institutions or the company.

Table 1: Bottom-up consultations on metal mining in Latin America
Selected cases, 2002-2012

<table>
<thead>
<tr>
<th>Case, Country</th>
<th>Date</th>
<th>Number of voters (and % turnout)</th>
<th>Percentage of voters against mining</th>
<th>Percentage of voters in favour of mining</th>
<th>Percentage of voters who abstained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tambogrande Project (Piura)</td>
<td>1 June 2002</td>
<td>27,015 (69%)</td>
<td>94%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Esquel Project (Chubut)</td>
<td>23 March 2003</td>
<td>13,845 (75%)</td>
<td>80%</td>
<td>18%</td>
<td>2%</td>
</tr>
<tr>
<td>Majaz/Río Blanco Project (Piura)</td>
<td>16 September 2007</td>
<td>18,017 (60%)</td>
<td>95%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Toquepala Project (Tacna)</td>
<td>17 February 2008</td>
<td>3,478 (n.a.)</td>
<td>93%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Tía María Project (Islay, Arequipa)</td>
<td>27 September 2009</td>
<td>12,191 (n.a.)</td>
<td>95%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Quimsacocha Project (Azuy)</td>
<td>2 October 2011</td>
<td>1,037 (67%)</td>
<td>92%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Lonco Project (Loncopue, Neuquén)</td>
<td>2 June 2012</td>
<td>2,588 (72%)</td>
<td>82%</td>
<td>15%</td>
<td>3%</td>
</tr>
<tr>
<td>Cañariaco Project (Cañaris, Lambayeque)</td>
<td>30 September 2012</td>
<td>1,896 (47%)</td>
<td>91%</td>
<td>5%</td>
<td>4%</td>
</tr>
</tbody>
</table>

*All the consultations displayed in this Table were based on secret voting. In all these cases the electoral register was used, except for the Tía María Project (Peru) where 2 out of 6 voting districts did not use the official register, and the Quimsacocha project (Ecuador), where the consultation was directed at the registered members of the water users’ association.
RECOMMENDATIONS FOR POLICY-MAKERS

EU-LAC cooperation

1. Adopt consultation of local communities and public dialogue over extractive activities in the new Action Plan for bi-regional cooperation between the European Union and Latin America and the Caribbean. Genuine participation of communities is indispensable for promoting investments of social and environmental quality. It is also crucial for realising sustainable development in the framework of democracy, as mentioned in the LAC-EU Lima Declaration of 16 May 2008 (Article 30). The European Parliament recently stressed that such consultations are a bi-regional responsibility (Paragraph 52 of the Resolution of 12 June 2012 on defining a new development cooperation with Latin America, 2011/2286(INI)).

2. Include rules on the procedures of consultation of local communities on extractive activities in the bi-regional Strategic Association that is under construction, as well as in EU association agreements with LAC countries. Invite organisations or representatives of relevant stakeholders, including communities involved in conflicts over extractive activities, to participate in the design of these rules.

3. Apart from joint EU-LAC efforts for Corporate Social Responsibility, the European Union should also strengthen its regulation on overseas investments of European companies. Sponsor research on how to apply overseas legislation analogous to the 2004 European Environmental Liability Directive and the 2009 Environmental Crime Directive.

4. Cooperate on the reporting of extractive activities and environmental impacts in Latin America and the Caribbean by building on available data and experiences in LAC and the EU. Compare the behaviour of European and non-European companies investing in LAC and incorporate methods of collaborative research in a Science in Society framework, including civil society stakeholders. This effort will help both to improve the economic, social and environmental quality of investments and enhance transparency to prevent corruption and tax evasion.

5. Collaborate in the creation of regional, national and subnational databases on Material Flows for LAC, using European experience and cooperation with international organisations like ECLAC and UNEP. Policy-makers in both regions will be able to make better informed decisions for sustainable development when provided with more knowledge of material flows, trade patterns in volume, and ecological terms of trade.

LAC policy-makers

6. Increase efforts for improved participative mechanisms and for genuine consultation of local communities over extractive activities as part of policies for sustainable development as well as the advancement of democracy and peaceful conflict resolution.

7. Provide the technical and institutional capacities necessary for applying environmental impact assessments and keeping control of compliance with social and environmental norms at all phases of extractive activities. Local governments in remote areas with limited experience with extractive projects usually require extra support, including human capital.

8. Develop a regional platform for the exchange of information on best practices,
national experiences and local cases. This platform should involve governments, technical agencies, companies and organisations from civil society.

**Investors in LAC**

9. Adopt genuine incorporation of the needs, values and knowledge of local communities as a central element of Corporate Social Responsibility.

10. Take local social and environmental concerns fully into account when investing in LAC mining, fossil fuels, hydroelectricity and large-scale biofuel and agricultural projects. If these concerns are not properly addressed at all phases, it is likely that investors will be distrusted and met with resistance.

**RESEARCH PARAMETERS**

**Key objective of ENGOV**

‘Environmental Governance in Latin America and the Caribbean: Developing Frameworks for Sustainable and Equitable Natural Resource Use’ (ENGOV) is a collaborative research project including Latin American and European researchers. The project focusses on the region’s recent initiatives on environmental governance in order to analyse the obstacles and opportunities for sustainable production systems that can promote economic development and more equitable distribution of benefits. The project explores options for institutional innovation and inclusive approaches towards natural resource use that can decrease poverty, inequality, and environmental degradation in Latin America and the Caribbean. The project’s central objective is to understand how environmental governance is shaped in Latin America and to develop a new analytical framework for environmental governance in the region.

**Methodology and geographical scope**

ENGOV is a multi-disciplinary research project that uses a range of qualitative and quantitative methods from environmental sciences, economics, sociology, political sciences, anthropology and history. The participants’ academic expertise and experience on various themes and countries allow for a comprehensive assessment of new trends in environmental governance in the region. The main countries where empirical research is conducted are Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala and Mexico.

The research experiences of three consortium partners were indispensable for this Policy Brief: the Centre for Latin American Research and Documentation (CEDLA-UVA, The Netherlands), the Institute for Environmental Science and Technology (ICTA-UAB, Spain) and the Institute for Advanced Studies (IDEA-USACH, Chile). CEDLA carries out multidisciplinary social science and humanities research, and brings expertise on political ecology, international political economy and history to ENGOV. ICTA is an interdisciplinary institute with researchers working in the fields of ecological economics, integrated assessment and political ecology. ICTA conducts research on social metabolism and ecological distributive conflicts, applying quantitative (e.g. material flow analyses, HANPP) and qualitative (in-depth and comparative conflict analyses) methods, including social multicriteria methods. In the ENGOV project they focus on the comparison of mining conflicts. IDEA is a multidisciplinary research institute in international relations, social development, and environmental and cultural studies. For ENGOV they conduct interviews with strategic actors focusing on water and energy consumption, especially in the mining sector, and their main environmental impacts in Chile, Colombia, Ecuador and Argentina.
Further reading (see www.engov.eu):


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**PROJECT IDENTITY**

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www.xoc.uam.mx
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**Budget**
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