

Ambatovy Scientific Consultative Committee (SCC)

Key Recommendations, 24–27 July, 2023

The Ambatovy Scientific Consultative Committee (SCC) met in Madagascar over four days, from July 24 to 27, 2023, including two days in Antananarivo followed by a visit to the mine site. As in previous meetings, the Committee was provided an opportunity to meet and discuss with Ambatovy staff in an open, informative, and constructive manner, which allowed its members to review and develop an updated understanding regarding a wide range of topics. The members of the SCC greatly appreciated the quality, clarity, and relevance of the presentations and discussions led by Ambatovy staff, as well as the opportunity to meet and interact with the project Mine Manager. The Committee was very pleased to note that positive steps and effective responses have been taken by Ambatovy to address most of its previous recommendations and that many other recommendations are in the process of being addressed. The SCC also greatly appreciated the fact that a large number of informative reports were made available well in advance of the meetings.

Based on the discussions held during the 2023 SCC meeting, the following recommendations were formulated and presented verbally to Ambatovy staff during the closing session held on July 27 at the mine site. The Committee has attempted to formulate practical recommendations in the hope that they will be of assistance to Ambatovy's Environmental and Social Governance (ESG) staff, along with other recommendations that should also be given consideration by senior project managers, including members of Ambatovy's Executive Committee. Most of the recommendations presented below, if taken on board and addressed seriously, will result in better risk management, reduced exposure with regard to the project's obligations, commitments, and License to Operate (including in the challenging context of Madagascar), more effective use of resources, and improved perception of Ambatovy as a responsible operator and partner. As in previous SCC meetings, we have grouped our recommendations by themes in order to facilitate consideration by Ambatovy.

1. *Biodiversity*

- a. Members of the SCC were encouraged to learn that Ambatovy has engaged The Biodiversity Consultancy (TBC) to conduct an update of the project's No Net Loss (NNL) calculation and a review of the NNL indicators. Based on the resulting report, it will be important to ensure that the indicators being used by Ambatovy are well aligned with and appropriate for tracking progress toward achieving NNL over the life of the project. It will likely also be necessary to strengthen monitoring of several key biodiversity indicators (such as lemur population trends) in order to be able to demonstrate progress toward achieving NNL in a credible and verifiable manner.
- b. The sustainable management of Ambatovy's Conservation Zone (CZ) will be essential for meeting the project's NNL commitment. This will require engaging neighboring communities in order to develop a shared vision and understanding of how best to manage the landscape in which they and the CZ are both situated. Success in achieving a truly sustainable process that delivers the needed outcomes in order to meet the project's biodiversity obligations and commitments will require responsible co-management of the forests, with Ambatovy playing an appropriate role to support and accompany the local communities through community conservation agreements signed with COBAs that stipulate commitments and set clear indicators, and through the establishment of *dina* (traditional community rules), which could offer an opportunity for more inclusive participation than just working with local COBAs.
- c. The SCC reiterates its recommendation that Ambatovy pursue the possibility of translocating individuals of *Propithecus diadema* during forest clearance to appropriate sites (in particular the Betampona Strict Nature Reserve) as a conservation and population management measure for this Critically Endangered species, as well as a valuable opportunity for a net biodiversity gain for the project. The technical and administrative feasibility of such an action was clearly demonstrated by the successful translocation of individuals of this species to Analamazaotra in

2007. The Committee recommends that Ambatovy explore this opportunity with MFG and that any pertinent documents, reports, and data from the previous translocation as well as any relevant data on the current *Propithecus* population at the mine site be shared with MFG to inform a careful assessment of the current feasibility of translocating *Propithecus* to Betampona.

- d. More generally, the SCC strongly encourages Ambatovy to invest time in an effort to identify and pursue cost-effective opportunities to achieve net gains for important biodiversity values. Doing so would have benefits both for achieving the project's NNL commitment and for improving public relations and visibility.
- e. The Asian toad remains a serious threat to biodiversity and human health, including with regard to Ambatovy's NNL commitment, and it also continues to represent a very high reputational risk for the project. The SCC reiterates its recommendation that Ambatovy should continue to assist the MFG-led project to mitigate the impacts of the spread of the Asian toad by 1) following through on its written commitment to help identify and engage potential donors and providing assistance to secure further funding, 2) supporting efforts to increase awareness of the Asian toad, its impacts, and required control and mitigation measures at high levels of government, 3) building awareness among managers of protected areas (PAs) throughout Madagascar, including Madagascar National Parks as well as other operators, and among funding agencies that support PA management and operation, such as FAPBM, and 4) supporting the establishment of a national strategy and leveraging the funds required for mitigation. The Committee also recommends that Ambatovy discontinue investing resources in the removal of Asian toads from the plant sight, which provide no clear benefit.
- f. The re-introduction of animals into natural habitats, as is currently being done for *Mantella aurantiaca*, carries a risk of accidentally introducing diseases from captive bred individuals into natural populations. Ambatovy has been well aware of this risk for many years and has recently screened captive-bred as well as wild individuals for the Chytrid fungus and for Ranavirus, the two most devastating diseases for amphibians worldwide. In order to avoid the introduction of amphibian diseases when re-introducing captive bred *Mantella aurantiaca* to receptor ponds in the CZ, the SCC recommends that Ambatovy maintain disease screening for captive *Mantella* prior to re-introduction (on a yearly basis).
- g. During the SCC meetings, options were discussed for the possible biological control of *Lantana camara* as well as other highly invasive plant species. Potentially valuable information in the control of invasives is available, including on the internet (e.g., cabi.org), and the Committee recommends that Ambatovy staff explore its possible relevance and utility at the project site.
- h. Ambatovy is using a high quantity data protocol for monitoring fauna and flora. The SCC noted, however, that the subsequent use of these data (in particular statistical analysis) is not fully adequate and that opportunities to gain valuable insights from their interpretation are being lost. As an example, data on population densities, number of individuals, and other important parameters regarding some animal species need to be corrected for survey effort (e.g. survey days, transect length) in order to ensure comparability of data between years and sites and to improve the accuracy and reliability of detecting population trends (i.e., changes over time). The SCC therefore recommends that Ambatovy adopt more appropriate methods for analyzing and interpreting monitoring data, perhaps consulting external scientific specialists to provide advice and coaching.
- i. The Committee was pleased to observe that construction of the Ambatovy Biocenter has been completed, and encourages the project to ensure that a robust vision and operational plan are full in place and that opportunities, including a dedicated scholarship program, are created so that external students and researchers can conduct studies in and around the site, including the CZ. This will make valuable contributions to improved understanding in both the biological and social domains, while concurrently building national capacity and expertise, along with valuable exposure and recognition for Ambatovy.

2. *Interaction between social and environmental programs*

- a. Many of the community-based activities carried out by Ambatovy's Social Team are focused on developing and supporting livelihoods, whereas activities conducted by the Environment Team largely aim to reduce threats on biodiversity and promote sustainable use of natural resources. These activities are not, however, adequately coordinated. The actions undertaken by one team can and often will have direct or indirect impacts on the outcomes the other team is attempting to achieve, and these impacts can be positive or negative. The Committee sees significant scope for increasing the value and impact of investments being made by Ambatovy in communities and interactions with them by identifying synergistic actions that contribute concurrently to improving livelihoods, reducing threats on biodiversity, and ensuring that natural resource use is sustainable – all of which is essential if the project is to be successful in meeting its commitment to achieve No Net Loss of key biodiversity while at the same time meeting its responsibilities with regard to community engagement.
- b. It is essential that Ambatovy ensure its investments in communities are carefully and strategically targeted to benefit and impact specific and appropriate groups, such as those most likely to be able to achieve successful implementation of a development action or those whose practices are threatening biodiversity. Broadly targeted actions, while laudable and often perceived in a positive way, carry a significant risk of diluting valuable project resources and increasing the investment required to meet the project's obligations and commitments.
- c. In 2021 the SCC formulated four recommendations under the heading 'Community Relations'. Each of these recommendations remains highly pertinent in 2023, and the Committee therefore wishes to reiterate these recommendations and to urge Ambatovy staff to revisit them and give them careful consideration.

3. *Community engagement and social issues*

- a. As mentioned in previous SCC recommendations, land tenure remains a critically important issue for Ambatovy. While the legal processes involved in clarifying and securing land tenure in Madagascar are very complex, significant insight and value can be gained simply by conducting community-level land tenure diagnoses in order to develop a clearer understanding of how land 'ownership' (in its various meanings and interpretations) relates to stakeholder groups so that investments can be appropriately targeted. Conservation International and the Missouri Botanical Garden have significant relevant experience in addressing these issues, upon which Ambatovy may wish to draw (see recommendation below regarding external expertise).
- b. Interaction during the 2023 site visit between the SCC and local community members revealed a situation regarding education about which the Committee was not previously aware. Community members expressed concern with gender issues related to young girls, who are seen as not needing to have the same level of education level as boys. This is a serious concern that could undermine the sustainability of Ambatovy's actions, in particularly with regard to how the Sustainable Development Goals (SDG) are being addressed, and especially SDG5. The SCC urges Ambatovy to provide the needed focus on this issue and to implement measures as part of its social-related activities in an effort to overcome this prejudice with regard to gender, which if unaddressed will affect the future of these communities and in particular that of their women.

- c. The SCC was also made aware that children in the communities being engaged by Ambatovy are not able to complete their secondary education because of difficulties in transportation to the high schools in the area. It was also not clear whether the children in these communities all have full access to the first eight years of education. The SCC would be interested to have access to statistics on the evolving number of children, both male and female, that benefit from Ambatovy's education program. We recommend that options be considered for facilitating access to high school for qualified children in the communities with which Ambatovy is working.
- d. The SCC further recommends that Ambatovy should prioritize training members of these communities, and in particular the young generation, to prepare them to become the future wardens of their landscape, including forest and the other sources of their livelihoods. The SCC recommends that a program of vocational training be established to ensure that the younger elements of the community begin to acquire the specific skills that will enable them to feel confident about their capacities, in the same way Ambatovy currently does for its own staff, who are proudly and rightly referred to as world class experts in their specific fields.

4. *Restoration and rehabilitation*

- a. The SCC noted during its site visit that significant progress has been made through Ambatovy's ecological restoration and rehabilitation efforts, setting the stage for the significant up-scaling that will be required in the near future. The Committee reiterated the critical need for Ambatovy to ensure that mine planning and scheduling fully integrate the vital need to ensure that the transfer of management of mined areas to the Environment team for restoration proceeds as a smooth and well-informed process. This is essential in order to minimize uncertainty for the restoration team, both in terms of specific areas and total surface to be restored, and to ensure a progressive ramp-up in the total annual area being passed on to them. The risks associated with inadequate planning and coordination are very significant and could profoundly compromise Ambatovy's ability to meet its obligations and commitments with regard to restoration. A clear and mutually agreed timetable is required for scaling-up restoration, which must then be managed and adhered to at all levels and by all operational departments.
- b. During the site visit the Committee became aware that there are several issues associated with the external sourcing of compost for restoration, which involves engaging members of the local community to provide organic material on a contract basis. Firstly, local sourcing potentially deprives these communities of a valuable resource for addressing village-level needs. Moreover, importing compost from areas outside the mine site carries potential biosecurity risks and could inadvertently stimulate the development of unsustainable commercial-scale extraction of forest products for compost production.
- c. The SCC recommends that Ambatovy explore other options for obtaining the organic material needed to support its restoration work, such as identifying and promoting alternative sources and developing restoration methods that require less organic material.
- d. The Committee was pleased to learn that Ambatovy has established an Ecosystem Services (ES) coaching program. During discussions with project staff, members of the SCC noted, however, that information was presented only on provisioning and cultural services, and that regulation services (climate, water, carbon, temperature...), which may be highly relevant to the project's Climate Change program, are not being taken into consideration. The SCC also pointed out that it is important to assess the potential of ES in areas where communities are currently not deriving any benefits from these services (namely in areas of limited access within the premises of Ambatovy mining activity), but which nevertheless represent potential sources of such services once those ecosystems become accessible again following restoration and reforestation. The Committee thus recommends that Ambatovy give careful consideration to adopting a 'NNL of Ecosystem Services' approach as an objective framework for restoring ES to the same levels as prior to project startup, and for gaining visibility and credit for another aspect of Ambatovy's restoration program.

5. *Climate resilience*

- a. Over the duration of the Ambatovy mine project, environmental conditions will change significantly, in large part as a result of climate change, and this will challenge the success of Ambatovy's environmental and social programs. The Committee recommends that all activities should be evaluated systematically for their resilience against climate change, and that they should be adapted accordingly if necessary. Topics that might be worthy of consideration include soil erosion, the project's sediment retention dams, fire management and prevention, and offsetting, *inter alia*. The SCC suggests that climate resilience also be integrated into closure and post-closure planning.

6. *Project vision and closure*

- a. The SCC was pleased to note that Ambatovy has begun to focus closely on developing a robust closure plan, drawing from valuable and relevant experience gained from other mining projects. In particular, the Committee endorsed the idea that the development of a roadmap and vision leading to a closure plan will be essential, not only to ensure that Ambatovy is able to meet its end-of-project obligations, but also to ensure that ongoing environmental and social activities are explicitly directed toward achieving Ambatovy's post-project vision with respect to communities, biodiversity, and natural resources. The SCC reiterated its previous recommendation that Ambatovy work with key stakeholders, in particular local communities, to develop a clear and well articulated post-closure vision, and that this be captured in the form of an artist's birds-eye rendition of the mine site and the surrounding area, including a clear explanation of how various areas will look, how they will be managed, by whom, and for what purposes.
- b. In conjunction with developing a closure plan, the SCC recommends that Ambatovy continue and reinforce the compilation of information about the history of the project environmental and social programs, along with key documents and reports, and data compiled by project staff and external collaborators. Relevant information about the project's history should be integrated into operations and made available in the form of a summary set of documents in order to ensure continuity, especially given the significant risk associated with high levels of turnover among senior and mid-level operational staff.

7. *External expertise*

- a. As mentioned in previous years, the SCC recommends that Ambatovy seek to engage and benefit from the knowledge and expertise of NGOs working in Madagascar (such as MBG and CI) and elsewhere (e.g., Tiniguena in Guinea-Bissau) on community development matters.
- b. The SCC reiterates our previous recommendation regarding the need for Ambatovy to be adequately supported by an expert on contaminants. The members of the SCC were not clear concerning the situation of Mn contamination and leakage from the project's tailings area, and in any case, the Committee does not have the relevant expertise that would be needed to provide useful comments or recommendations regarding this matter. In addition to the monitoring of community wells, as recommended previously, it will be important that Ambatovy undertake a systematic monitoring program of groundwater quality as well as the quality of surface water upon which communities depend, together with effective measures to mitigate the levels of Mn in water and soil.

8. *Requests*

- a. Members of the SCC feel that it would be valuable for Ambatovy to review and possibly update and revise the Committee's Terms of Reference. As a first step, we request that Ambatovy provide a clear indication of the functions, operational approach, and expertise it wishes to obtain from the Committee and of the role it sees for Committee's within the broader context of the project's operations.

- b. The SCC also suggests that future in-country meetings be held entirely at the mine site, and that Ambatovy consider holding them annually, which would render the Committee's work more useful and pertinent. Multi-day on-site meetings could also be alternated with shorter, 1-day virtual meetings (by video conference) focused on specific subjects.
- c. Finally, the Committee also requests that Ambatovy establish a link on its web site that provides users direct to access the PGES posted on the ONE website. Similarly, the SCC also recommends that Ambatovy provide access to the PGES recommendations that the project is working to address and resolve.