

Offsets: guiding practice in Russia's energy sector

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Introduction

Russia has ratified the Convention on Biological Diversity; its objectives and targets in the 2014 National Strategy and Executive Plan for the Conservation of Biodiversity within the Russian Federation or 'NSEP' (Ministry of Natural Resources and Environment: MNRE 2014a) are intended to correspond with Aichi targets, including halving rates of loss of natural habitats, significantly reducing degradation and fragmentation, and safeguarding essential ecosystem services.

Russia's economy is heavily dependent on natural resource extraction. Regions of globally significant biodiversity are increasingly targeted for energy development, leading to destruction and increasing fragmentation of intact habitat in areas of oil and gas exploitation (MNRE 2014b). Warner *et al* (2002) noted that the resource base is being consumed at unsustainable rates, with "...little value being recovered and distributed to the public".

Projects in the energy sector require EIA and measures to mitigate harm. Provision is made in law for both State and in some cases Public environmental expert review of project documentation. Compensation is required for ecological damage (including for loss of commercially important or Red Listed species), taking the form of payments to government according to rates and damage calculations in line with the federal law on Environmental Protection. 'In kind' compensation is limited to the release of fish fry into rivers, but not necessarily into the same river system as affected by a project.

According to Plyusnin and Müller (2014, p12), the main deficiency of the Russian system of compensation is "the absence of precisely stated requirements for mandatory natural compensation adequate to these impacts".

There is growing interest in addressing ecosystem services in Russia (MNRE 2014b). The assessment of impacts of industrial activities and spatial planning has begun to consider ecosystem services, but there has been insignificant overall progress in this field to date. The development of ecosystem services concepts and economic assessments in EIA of large industrial projects is of particular interest to Regional and Federal Authorities.

Both the NSEP and the 5th National report on Conservation of Biodiversity in the Russian Federation (MNRE 2014b) emphasize the need to increase the ecological and social responsibilities of businesses, and involve the business community in the activities aimed at biodiversity conservation and sustainable use, and the development of partnerships between the state, business and scientific communities and the public.

To promote good practice and support the objectives of the NSEP, the UNDP/ Global Environmental Facility (GEF) and Russia's MNRE initiated the 'Mainstreaming biodiversity conservation into Russia's energy sector policies and operations' project. This project included the preparation of guidance for companies operating in the energy sector, focusing on biodiversity offsets (UNDP 2015).

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Approach

Offset approaches and requirements of different countries, companies, organizations and institutions (including the International Finance Corporation Performance Standard 6) were synthesized, as well as 24 case studies from around the world. The views of a range of Russian stakeholders (regional and federal authorities, Public Chamber representatives, companies, research organisations, and non-government organisations) in regions of Russia where the UNDP project was being piloted were gathered. Two pilot studies on ‘in kind’ compensation in Russia were evaluated: a coal mine in Kemerovo Oblast and a hydropower plant in Amur Oblast (Figure 1). General guidance was then prepared for use by companies, responding to the needs expressed.



Figure 1: Coal mine, Kemerovo Oblast (left); hydropower project, Amur Oblast (right)

Findings

Stakeholders identified the lack of guidance on when and how to address biodiversity in project planning and EIA as problematic. One interviewee stated that *‘The best intervention for biodiversity conservation would be ‘to get EIA working correctly’*. In some cases, decisions on land use (e.g. allocation of land for coal mining) were taken before an EIA had been conducted, undermining its effectiveness.

The standard of EIA practice is variable and to some extent depends on the veracity of review: State environmental expert review is only required for a minority of development projects (e.g. not required for most coal mining projects), but it does appear to act as a check on the ecological adequacy of project documentation. Deficiencies in current practice include insufficient gathering of baseline information on biodiversity in the early phases of a project (on which impact assessment is based), poorly developed mitigation measures, and engagement with key stakeholder groups too late in the process to have any positive influence.

Mitigation of biodiversity impacts in Russia focuses on Red List and commercial species. Mechanisms such as *ex situ* conservation and ‘search, rescue and relocate’ are encouraged as a remedy for dealing with impacts on these species. Rehabilitation of impacted areas is often undertaken with commercial timber rather than reinstating natural communities. There is strong emphasis on monitoring as a way of managing ecological damage, but it is often unclear how the results of monitoring would be used to evaluate and adapt mitigation actions to improve management and biodiversity outcomes. Stakeholders criticised the current form of compensation as reacting to damage, rather than proactively mitigating and managing it. Moreover, the system of paying for loss

of individuals of a species fails to address impacts on the long-term viability of that population or species.

The need to provide ‘in kind’ compensation for damage – framed as ‘compensation in nature’ - was repeatedly raised as a core issue. Stakeholders felt that compensation should benefit those parties and ecosystems negatively affected by a project. In the current system of payments, compensation fails to benefit affected communities and ecosystems. There was ‘*sincere indignation*’ amongst affected people at the ongoing loss of, and damage to, biodiversity. It was felt that local communities affected by damage to ‘their’ nature do not receive adequate compensation, and that the current level of investment by companies in conserving nature – largely rehabilitating surface damage - is not enough.

Companies interviewed recognised that providing offsets could benefit their reputation and give them a competitive edge. They felt uncomfortable to be seen as ‘the problem’ by affected communities, since compensation paid to government for environmental damage did not materially benefit these communities. However, there was reluctance to ‘pay twice’: legally required compensation payments for damage in addition to the costs of delivering ‘in-kind’ compensation to affected places and people. (Interestingly, a recent constitutional court judgement seems to pave the way for reduced payments provided that mitigation measures implemented by the project developer were effective²). Companies felt that project documentation could be improved by including efficient offsets and budgeting for them early on in the project cycle.

The Guideline

For offsets to work in Russia, the whole way that biodiversity was addressed in EIA would need to be improved, particularly focusing on application of the mitigation hierarchy. The mitigation hierarchy (‘ARRO’: Avoid, Reduce, Restore, Offset) is incorporated in Russian environmental law, encompassing prevention of harm to the environment, reduction of unfavourable consequences, and compensation for damage *over prescribed, legally permissible norms of admissible effects*. These norms are stipulated for particular environmental components e.g. water, forestry and specific animals, using ‘best available technologies’ as a mechanism for introducing or defining these norms. Despite this framework, it seems that the mitigation hierarchy is not sufficiently clearly articulated, understood or applied in EIA practice in Russia.

The Guideline comprises eight parts on particular themes responding to the concerns and needs expressed by stakeholders. Part A looks at the importance of biodiversity and ecosystem services in Russia, and describes the institutional and regulatory context for addressing them in project planning and EIA, and provisions for compensation. Part B explains what is meant by ‘biodiversity’ and ‘ecosystem services’, and sets out the business case for companies to exercise ‘good practice’ impact assessment and apply the full mitigation hierarchy – including offsets. Part C of the Guideline covers compensation and offsets; where they fit into the mitigation hierarchy, and when they would be required.

The Guideline then sets out the core principles of biodiversity offsets in Parts D and elements of ‘good practice’ stakeholder engagement in Part E before covering application of the mitigation

² <http://www.jus.uio.no/pluricourts/english/blog/maksim-usynin/russian-constitutional-court-refers-to-the-polluter-pays-principle-and-reduces-liability-b.html>

hierarchy in project planning and EIA. Part F of the Guideline goes into some detail on addressing biodiversity and ecosystem services, emphasizing the need to identify important biodiversity and priority ecosystem services early on in project siting and design, preferably avoiding significant impacts. It incorporates the concepts of keeping risk ‘as low as reasonably practicable’ (the ALARP principle) and using best available technology to this end. It also gives guidance on ecosystem services assessment and economic valuation. Parts G and H guide companies in setting explicit goals for biodiversity and offsets, respecting core offset principles, and in designing and implementing offsets in the Russian context. Part G includes guidance on respecting limits to biodiversity loss, selecting the most appropriate form of offset, satisfying equivalence in the exchange, where and when to offset, ensuring additionality, avoiding leakage, dealing with uncertainty, and checking the technical and social acceptability of a proposed offset. It sets out the possible role for ecosystem services assessment and valuation in offset design. Part H, planning for offset implementation, comprises sections on long-term protection, financial provision, preparing a biodiversity action or offset management plan (as appropriate), monitoring and adaptive management, and incorporating this plan within a company’s Environmental Management System. It includes a section on choosing an implementing agent, verification and auditing, as well as data management, reporting and disclosure.

Annexures support the main body of the Guideline, including a template for companies to track, evaluate and report on their own performance in designing and implementing offsets. Summaries of 24 case studies from around the world on offsets - mainly in the energy sector - are included, as are numerous useful sources of information on ‘good practice’ in biodiversity-inclusive EIA and offsets in the coal mining, hydropower, and oil and gas sectors. One annexure deals explicitly with ecosystem services assessment, consideration in impact assessment and economic valuation. Another covers typical key biodiversity and ecosystem services issues encountered in energy projects.

Conclusions

The Guideline synthesizes available information and guidance on ‘good practice’ consideration of biodiversity and ecosystem services in the energy sector for use by Russian companies in their project planning and EIA. It responds to a need for improved approaches to applying the mitigation hierarchy and providing appropriate ‘in kind’ compensation or offsets, both for biodiversity and important ecosystem services. The content of the Guideline responds to the shortcomings expressed by stakeholders, and their expectations of such a guidance document.

The focus of the Guideline was initially intended to be on offsets. However, it became clear that without strengthening the broader field of biodiversity-inclusive project planning and EIA, that focus would be ineffective and inappropriate. In addition, while the Guideline’s emphasis is on projects, the need to locate biodiversity impacts in a broader landscape highlighted the lack of strategic conservation planning, Strategic Environmental Assessments and spatial prioritization of areas for protection. The latter would provide a valuable ‘higher-level’ framework into which projects and offsets should slot, both to enable better ‘avoidance/ prevention’ of unique or irreplaceable areas, but also to guide offsets to sites where they could make the best contribution to wider landscape-scale conservation targets.

The Guideline was prepared for use by companies in the energy sector. It aims to support the stated objectives of the NSEP, by striving to increase the ecological and social responsibilities of businesses,

and involve the business community in activities aimed at conservation and sustainable use of biodiversity. It makes the case for 'compensation in nature' for ecological damage rather than payments to the state. While legislative reform to incorporate 'in kind' compensation could take time, other business and 'good practice' drivers exist to encourage this approach. These Guidelines are intended to help companies that need or wish to comply with good practice operate responsibly and contribute to sustainable development. It is hoped that the Guideline will also be used by government authorities and non-government organizations: helping to introduce consistency and rigour in approaches to biodiversity-inclusive EIA in general, and compensation/ offsetting in particular; and to achieving Aichi targets, Sustainable Development Goals and meeting international obligations.

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