

**Mid-term Review
Integration of Environmental Education
into the Macedonian Education System**

Final Report

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Mid-term Review: Integration of Environmental Education into the Macedonian Education System

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Final Report

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Abbreviations

BDE	Bureau for Development and Education
CHF	Swiss Franc
CVE	Center for Vocational Education
DAC	Development Assistance Committee
EC	European Commission
EU	European Union
EUR	Euro
FEE	International Foundation for Environmental Education
GEF	Global Environmental Facility
MoES	Ministry of Education and Science
MoEPP	Ministry of Environment and Physical Planning
MoLSP	Ministry of Labour and Social Policy
MoU	Memorandum of Understanding
NGO	Non-Governmental Organisation
NPAA	National Programme for Adoption of the <i>Acquis Communautaire</i>
OECD	Organisation for Economic Co-operation and Development
OT	Operational Team
PHZ	Pädagogische Hochschule Zürich
ProDoc	Project Document
REC	Regional Environmental Centre
SC	Steering Committee
SCO-M	Swiss Cooperation Office in Macedonia
SDC	Swiss Agency for Development and Cooperation
SEI	State Education Inspectorate
ToR	Terms of Reference
UNDP	United Nations Development Program
ZELS	Association of Local-Self Government Units

Management Summary

Background

The Swiss Agency for Development and Cooperation commissioned the authors of this report to carry out a mid-term review of the programme *Integration of Environmental Education into the Macedonian Education System*. The Ministry of Education and Science (MoES), the main implementer of the programme, is supported by OXO, a Macedonian non-governmental organisation, in gradually taking over the full management of the programme. The programme, now in its fifth phase, is rolled-out between 2010 and 2013. It aims at scaling-up environmental education throughout Macedonia's education system and integrating environmental education firmly into the school system. Furthermore, with training and a small grant component, the programme undertakes to encourage school administrations and municipalities to – broadly speaking – integrate environmental issues in school management. The programme intends to raise awareness and encouraging particularly children to act in an environmentally responsible manner with the long-term effect of contributing to an improved environmental status in Macedonia.

Purpose and Methods

The main objective of the mid-term review is to assess the extent to which the objectives of the ongoing phase were achieved as of yet. The evaluation is based on the OECD-DAC methodological framework and employs primarily qualitative methods. Following an in-depth document review, we performed a series of semi-structured interviews and focus group discussions with different stakeholders (donor representatives, senior public officials, teachers, students, civil society representatives, members of academia, contractors and backstoppers of OXO) so as to triangulate the responses with a view to increase the validity of our report.

Findings and Lessons Learned

The evaluators consider that the project achieved remarkable results in integrating environmental education into the Macedonian education system. The MoES and OXO have implemented a sizable work programme and are likely to deliver all key outputs as planned in the underlying programme documents. The decision to entrust the MoES with the (formal) project management responsibility has been beneficial since this measure gave the project the required authority from which schools (and municipalities) can hardly abdicate from. It is important that the MoES puts at the disposal resources and capacity to follow suit, since longer-term support is required to ensure that the successes that have been achieved thus far become deeply rooted in the routines of teachers, school principals, municipal and governmental staff.

Recommendations

In the following we summarise our key recommendations (shortened version; for the full set of the recommendations please see Chapter 7) for the remainder of the current programme phase and an eventual extension of the programme.

- *Deliver (more) training on the environmental education programme to programme stakeholders beyond the immediate school environment*, including in particular selected municipal staff, institutions that train teacher students, and the in-service training of the BDE. Particularly as regards teachers non-formal ways of capacity building (e.g. workshops, seminars) should be utilised rather than attempting to change the formal syllabi / curricula of teacher training institutions in Macedonia.
- *Collect and disseminate information on good practices* as regards the integration of environmental education topics into specific subjects. Such dissemination could be done in the form of an internet platform or a *blog* or *Facebook group* that OXO moderates.
- *Upload electronic versions of handbooks and manuals etc. for teachers and school principals*, which should be beneficial for creating a common starting point for the entire teaching body in schools.
- *Engage in a more strategic collaboration with ZELS*, particularly as regards the delivery and facilitation of training for municipal staff and the dissemination of good practices on environmental education across municipalities.
- *Consider collaboration and/or backstopping support by relevant actors from Switzerland*, for instance, *Stiftung Umweltbildung* or *Forum Biodiversität*.
- *Support OXO in presenting its experience and knowledge in neighbouring countries* – particularly Albania and Kosovo, where there is apparent interest in similar type programmes – with a view to support OXO in presenting its experience, services and products to relevant government agencies and in positioning OXO as competent implementing agency and advisory service on environmental education.
- *Support OXO in its organisational change effort* and in developing a clear organisational strategy and operational plan.

In the event SDC takes the decision not to extend the project, we argue that the following recommendations should be taken into consideration:

- *Extend the implementation period of the project to allow all participating municipalities to take part in the full set of project activities*, to provide all schools in Macedonia with the opportunity to fully implement the seven-step change process in 2012 with a view to receive the Green Flag and be able to apply for a grant for a small capital investment.

- *Develop programme management procedures:* With a view to ensure that the MoES and (and other pertinent government institutions) are fully equipped with the knowledge and skills required to continue, for instance, the eco-school component of the project it is instrumental that management procedures are developed.
- *Review the pending work programme with a view to utilise resources where they yield most return.*

Any continuation or extension of the project also necessitates entering into discussions with the MoES (and eventually other governmental bodies) regarding the (co-)financing the programme implementation. At present the MoES has reportedly not earmarked funds for the continuation of the project beyond August 2013. In order to mitigate the risks that the current Programme Coordinator eventually leaves her position in search for other opportunities, the future of her current position should also be clarified as soon as possible.

In terms of project delivery we recommend that the MoES continues to take the leading role whereas OXO acts both as a backstopper to the MoES and direct implementer of certain activities.

Acknowledgements

We would like to acknowledge and extend our gratitude to all persons who cooperated with us during this external review, particularly Ms Stanislava Dodeva and Ms Aleksandra Mladenovska-Kostic, who greatly supported us in the planning, organisation and roll-out of the review.

The views expressed by the evaluators do not necessarily represent the opinions of the Swiss Agency for Development and Cooperation, the Ministry of Education and Science or OXO. The conclusions, recommendations and eventual remaining errors are ours.

Harald Meier and Ana Mickovska-Raleva

1. Introduction

Education is in a process of continuous reform as Macedonia positions itself for membership with the European Union (EU). In its most recent Progress Report the European Commission (EC) acknowledges that even though the country remains below the EU average some progress in the field of education has been achieved over the past years, and mentions concretely the design of strategies for introducing environmental education.¹

Switzerland has been supporting environmental education² for more than a decade. It started in 2002, with the programme entitled '*We don't have a spare planet*', which was scaled-up in 2010 under the title *Integration of Environmental Education into the Macedonian Education System* (the project³). The project, which initially started as a product of the Macedonian NGO OXO is undergoing a process of institutionalisation, through sequentially transferring parts of the activities to the MoES. The project aims at integrating environmental education firmly into the school system by including environmental education goals and activities into the schools' annual planning. Furthermore, with training and a small grant component, it undertakes to encourage school administration and municipalities to – broadly speaking – consider environmental issues in school management. Raising environmental awareness and encouraging particularly children to behave in an environmentally friendly and responsible manner shall bring about positive effects to the environmental status and living conditions in Macedonia. All project activities shall progressively be transferred to and institutionalised within the Ministry.

In light of the end of the project in August 2013 the Swiss Agency for Development and Cooperation (SDC) commissioned the authors of this report to carry out a mid-term review of the project. This report presents our evaluation results.

Chapter 2 summarises the purpose of the evaluation and the methods we employed. In Chapter 3 we provide an overview of the project context. Chapters 4 and 5 present the main findings of the evaluation that we draw on the basis of the desk study and the field mission. We translate our findings into conclusions and lessons learned in Chapter 6 and formulate our recommendations in Chapter 7. More information and background documents are annexed to this report.

¹ The former Yugoslav Republic of Macedonia, 2012 Progress Report, European Commission, {COM(2012) 600 final}, Brussels, 2012

² Definitions of the term environmental education differ; often employed are definitions of the International Union for the Conservation of Nature IUCN (1970) or the United Nations Educational, Scientific and Cultural Organisation UNESCO (1977), which states that: "*Environmental education fosters clear awareness of and concern about economic, social political and ecological interdependence in urban and rural area; provides every person with opportunities to acquire the knowledge, value, attitudes, commitment and skills needed to protect the environment; creates new patterns of behaviour of individuals, groups and society as a whole towards the environment.*"

³ We use the term *project* throughout the report for reasons of clarity and readability.

2. Purpose and Methods

The main objective of the mid-term review is to assess to which extent the objectives of the ongoing phase were achieved as of yet. In addition, the evaluation shall shed a light on the project approach and project management and, as a specific feature of this assignment, assess OXO's organisational capacities in light of the intention to develop into a *Regional Environmental Education Centre*.

The assigned terms of reference (ToR) foresee to measure whether “... *the institutionalisation of the environmental education in the Macedonian educational system contributed to an improved environmental status, as well as to better life conditions...*”. SDC clarified that the term “*environmental status*” is understood not to refer to issues such as air, water or soil quality or noise emission but rather in a broader, more general sense. Consequently, it was agreed that a qualitative assessment regarding schooling and environmental conditions in the kindergartens and schools be carried out, based on perceptions and observations by the interviewees. It is thus not expected that the evaluation measures to what extent the project contributed to, for instance, improving environmental indicators.

The evaluation, which contains both summative as well as formative elements, is governed by the OECD-DAC evaluation framework. Upon specific request of the contracting agency the evaluation focuses on effectiveness, efficiency and sustainability, whereas the dimensions relevance and impact are not assessed. The report discusses the organisational performance (and development) of OXO and responds to the specific evaluation questions in the ToR.

We applied methods of qualitative research, including a comprehensive review of project related documents and semi-structured personal interviews as well as focus group discussions with students and kindergarten/school staff.⁴ The interviews (personal and telephone interviews) were carried out with different stakeholders (donor representatives, senior public officials, teachers, school principals and students, civil society representatives, members of academia, contractors and backstoppers of OXO) in order to triangulate the responses with a view to increase the validity of our report. In total we performed more than 30 interviews and focus group discussions with a total of more than 60 respondents. The interviews were discursive and yielded qualitative information particularly on the project's effectiveness and sustainability.

As noted prior to the commencement of the assignment, data analysis is hardly used, given that virtually no hard data is available (e.g. on energy saving as a result of energy efficiency investments in schools).

⁴ The annexes contain the interview questionnaire, the documents we reviewed, a list of persons who were interviewed for this evaluation and the schedule of the field mission in Macedonia (19-23 November 2012).

3. Background and Context

3.1. Project Background⁵

SDC has been supporting OXO's efforts with regard to environmental education since 2002. Based on the results of an independent review in June 2009, it was decided to build up on successes that had been achieved to this date and to scale-up environmental education throughout Macedonia's pre-school, primary and secondary education system. The scale-up phase commenced in January 2010, with a planned duration that covers three academic years and that lasts until August 2013.⁶ The project is part of SDC's water and environment domain, more specifically the sub-domain for protection of biodiversity, under the current Cooperation Strategy 2009-2012. It is funded by SDC with a total budget of CHF 2.5 million with contributions of the MoES in the amount of approximately CHF 50'000 and of about CHF 350'000 by OXO

3.2. Project Context

Environmental issues have traditionally been taught in natural science subjects. Yet environmental education, as an element of cross-curricular and interdisciplinary teaching and learning, is a relatively new concept in Macedonia. Primarily non-governmental and international organisations have placed environmental education on the governments' agenda – including OXO in partnership with SDC.

Policy documents, sectoral strategies as well as primary and secondary legislation in Macedonia make reference to environmental education, such as the *National Education Strategy 2005-2015* or the *Law on Primary Education (2008)*. In 2008 environmental education became an elective subject of the third cycle of primary education (7-9th grade) and only two years later the government decided to introduce it mandatorily. Each teacher now has the obligation to integrate environmental education contents into the regular, subject-specific syllabi.

Apart from OXO several other organisations in Macedonia attend(ed) to the issues of environmental education.⁷ The following paragraphs provide for a brief description of three recent / ongoing projects:

⁵ In light of the requested page-limit of this report we refrain from a more detailed recount of the programme but refer to additional information that is provided in the assignment terms of reference that are annexed to this report. Additional information is available on: http://www.swiss-cooperation.admin.ch/macedonia/en/Home/Water_and_Environment/Protection_of_Biodiversity/Environmental_Education (last accessed on 31.12.2012) and <http://www.nrp.ork.mk> (in Macedonian).

⁶ Due to formal reasons in relation with the frame credit the respective programme contract was first signed until December 2011 and then extended until August 2013, along with the memorandum of understanding.

⁷ There have been occasional contacts with the respective implementing agencies of these interventions and there are a few examples of collaboration (e.g. with regard to a GEF grant to a school in Veles or the dissemination of eco-calendars in the USAID project). An attempt of closer collaboration between REC

- The Regional Environmental Center (REC), an international organisation, produced the Green Pack, a kit of teaching material about environmental protection and sustainable development, and distributed the latter to schools across Macedonia.⁸ The Green Pack includes a teachers' handbook with lesson plans, factsheets and diagrams on environmental topics, structured to provide users with information on each theme.⁹ Teacher training has been offered again in November 2012 and the utilisation of the Green Pack material is expected to increase as a result of the new obligation in terms of delivering environmental education.
- The Green School programme – an initiative for the promotion of environmental education implemented between 2008 and 2010 under the USAID-financed Primary Education Project – comprised 20 primary schools in Macedonia. Students participating in so-called Green Clubs worked on four environmental themes relevant for the schools: energy efficiency, saving water, managing waste and transport. Schools that earned the Green School award received financial support for investments into energy efficiency renovations and infrastructure updates. Resources for teachers and students were developed. This programme thus featured similar type elements as the project of our review.¹⁰
- The Project for Sustainable Energy, funded by the Global Environmental Facility (GEF), provides, *inter alia*, funding for application of energy efficiency measures in public buildings, with a focus on schools and kindergartens.

With the exception of small-scale projects the EU is not active in this field.

In the context of Macedonia's decentralisation process municipalities have assumed increasing responsibility in the field of education that allows them to become more actively involved in education. Ownership of schools was transferred to municipalities whereas the financing of school activities has become a shared competence of central and local government. The 85 municipalities play thus an integral part in the education system. Their involvement in the roll-out of the project is, consequently, of utmost importance.

and OXO as regards the development of educational material failed for reasons that were unable to establish with certainty.

⁸ Funding agency was the Austrian Development Agency with co-financing from the Ministry of Environment and Physical Planning (MoEPP) and the MoES.

⁹ The Green Pack is designed for children aged between 11 and 14 and features 22 environmental topics; the Junior edition is for children between 6 and 10 years of age and covers 12 topics. The Green Pack kit was developed by REC more than a decade ago and introduced in various Central, Eastern and South-Eastern European Countries. The material was revised to cater for the Macedonian-specific context.

¹⁰ It is noteworthy that there are examples of schools that were so-called "Green Schools" under the USAID project and were later awarded a "Green Flag".

4. Review of Implementation

4.1. Effectiveness

Effectiveness measures the extent to which the project attained the planned objectives, outcomes and outputs. Our assessment is structured along the five outcomes and associated outputs as defined in the project's logical framework and the specific evaluation questions.

Given the broad scope of the activities and the changes to the activities in the course of the project, we are unable to deliver an in-depth assessment of *all* the activities and achievements. Furthermore, it is in the nature of a mid-term review that we can only appraise the level of achievement to date and approximate the likelihood that the objectives and outcomes will be achieved until the end of the project. In the following we discuss particularly those outputs and activities that were most commonly mentioned during the interviews, which we believe is adequate to plausibly assess the extent of objective and outcome achievement.

Objective: The environmental status and life conditions are improved through institutionalising environmental education in the education system

It is a daunting task to gauge to what extent the programme hitherto contributed to improve the environmental status in Macedonia – and it is arguably daring to expect it had any measurable effect at all. Yet, all interlocutors share the opinion that the project contributed to raising awareness on environmental issues and contributed to sensitise people to the importance of environmental protection. The interviewees shared and highlighted selected examples and success stories that give reason to believe that the project has been successful in offering opportunities to youth to make their contribution to improving their immediate surrounding and to actively engage in improving their schooling and life conditions.

Outcome 1: Environmental education is a compulsory element of the curriculum

Contributing to the upgrading of environmental education from a previously elective to a compulsory element of the curriculum in kindergartens, primary and secondary schools (hereinafter: institutions) is arguably one of the most important outcomes of the project. Document review, interviews and spot-checks suggests that since spring 2012 curricula in all institutions have been updated and school annual plans feature environmental education. The project contributed to this effort with the design and the delivery of educational material – all approved by the BDE – in both Macedonian and Albanian language as planned, including activity books / manuals for pre- and primary schools, and eco-calendars; a teacher handbook for integral planning is forthcoming.¹¹ Interview feedback suggests that the quality of the material is

¹¹ Per year the project distributed 12'000 calendars and manuals; teaching material has usually a print-run of 1'000 copies.

generally considered to be high and that the material is used by teachers; occasional complaints were voiced that there are too few copies in the schools or that some schools did not receive certain (hand)books at all. Two outputs, namely the revision of curricula (cf. A.R.1 in the Logical Framework) and the revision of school statutes with environmental education components (cf. A.R.2) were not warranted to be implemented (according to and as agreed with the Bureau for Development and Education (BDE) and MoES), and more attention was given to assist schools in developing their annual school plans. A significant, yet unattended, development was the decision of the State Education Inspectorate (SEI) to include the four eco-standards (see below) into its “integral evaluation tool” (so-called Quality Indicators for Schools) to assess school quality. With this decision the eco-standards have thus become obligatory for schools and kindergartens.

Outcome 2: Schooling and environmental conditions in the institutions are improved

Core elements of this component are the eco-standards¹² and a seven-step change process¹³ – two programme elements that also empower pupils / students to be actively involved (e.g. conducting the situation analysis, defining the rules of the eco-code) and contribute to decision making to improve the school environment. Students who participated in our focus group discussions were particularly appreciative of their role in the school eco-boards.

The project operates a small-grant scheme of EUR 1'000 for schools that meet the eco-standards and seven-step process (and subsequently are awarded a Green / Silver / Bronze Flag). Until end of August 2012 grants in the amount of CHF 20'000, a fifth of the total grant budget, were issued to 24 institutions (which represents about a quarter of all potentially eligible schools). This number is said to rise to 44 schools with a Green Flag, 30+ with a Silver and 60+ with a Bronze Flag by the end of 2012 (evaluation procedures are in progress at the time of writing this report). Typical investments were made into solar panels, energy efficient light bulbs, automatic water taps, installations to use ground water, replacement of broken doors and windows as well as greening of school yards. None of the institutions the evaluators visited were able to provide detailed account of how much water or energy etc. they were able to save. Yet, estimates ranged from “*a few hundred euros*” to “*many thousand euros, given that we will use the solar panel for many years*”. Due to the fact that these

¹² The four eco-standards are: saving energy, saving water, maintenance of the school building, environmental and well-arranged yard. Each standard has a specific goal that is to be achieved with a set of actions and associated indicators. Fulfilling the standards should yield results in terms of improved environment or cost reductions in the amount of 10% compared to the previous year. A self-assessment tool – adapted to the Macedonian context by the backstoppers and OXO – assists institutions in evaluating their performance against the eco-standards.

¹³ The seven-steps are: establishing a school eco-board; carrying out an environmental situation analysis; developing an action plan; monitoring and evaluating; linking eco-school activities to the curriculum; raise general awareness of environmental activities, throughout the school and the wider community; produce an eco-code that enshrines the school’s commitment to improving its environmental performance. (Source: FEE).

projects are still at an early stage, with the passing of years it might become possible for schools to provide an account of how much water / energy etc. and money was saved. Evaluation reports of OXO provide information that, for instance, one school collected 120 kg of waste paper and more than 2'250 plastic bottles (the proceeds of which were used for school purposes). In a survey conducted in 2012 among 51 eco-schools/kindergartens 23 of 50 respondents say that the water eco-standard yielded financial savings in the range of 10-30% and 9 of 24 respondents estimate their financial savings related to energy in the same range. In the focus group discussions participants mentioned that changes can be observed in the cleanliness of the school facilities, the tendency of students to throw waste into the respective recycling containers (though students were more differentiated than teachers and school principals in assessing change). A database of the projects and effects of these environmental actions remains to be developed. It is thus not possible to give a more accurate account of the “environmental effects”.

Other activities that were positively mentioned in our interviews include: the organisation of eco-camps and study visits (Turkey, Romania, Malta); community and school events that carry an environment-related message.

Outcome 3: Stakeholders have improved managerial, institutional and educational capacities

The project delivered an impressive amount of training sessions for different stakeholders. By far the largest was the training cycle for school principals, teachers (the teachers act as programme coordinators within the respective school) and school psychologists / pedagogues, which unfolded in stages and covered 1/3 of all institutions each year. This approach allowed improving the training delivery from year to year based on the experience of the preceding year(s). Conversely, the training cycle ended only in spring 2012, meaning that some schools were required to implement the programme without training. Summing up all training events (including e.g. study tours and strategic planning workshops) more than 1'500 persons participated (including about 1'300 from primary and secondary schools and kindergartens). According to internal evaluation reports, participants have frequently evaluated the trainings positively, particularly participants from kindergartens and primary schools. Monitoring results of OXO suggest that in comparison with primary schools slightly fewer respondents from secondary schools qualify the level of cooperation with the project to be very satisfactory (80% vs. 77%).

The project introduced internationally recognised innovations into the education landscape in Macedonia (though this already commenced in previous phases of the “*We do not have a spare planed*” project). From our interviews and focus group discussions it emanates that the participatory methods such as the eco-boards and the young reporters stand out as positive examples. Nonetheless, schools’ and kindergartens’ capacities to create and manage an eco-friendly institution appear to be highly dependent on the managerial skills of the school principals and their level of understanding of the eco-school concept.

A central idea of the eco-school programme is to foster collaboration between schools, municipalities and the wider community and to meet the interests of different stakeholders. The results in this regard are mixed. While there are examples of “forerunner” municipalities, the project’s efforts to encourage more municipalities to take a more proactive role in the programme implementation have, as of yet, not yielded the expected results. A pertinent indicator is that until November 2012 only little more than a quarter of all 85 municipalities in Macedonia have entered Memoranda of Understanding with OXO. Similarly, interest in the 50-50% projects – a deal between a school and a municipality to split equally the annual cost savings that accrue from energy saving action in schools – is virtually nonexistent until to date, despite the clear, albeit possibly small, financial benefit for both parties involved. There are reportedly administrative impediments (schools are barred from receiving money on a bank account) and some schools argue that they don’t have the personal resources to initiate such projects but these factors cannot account for the overall lack of interest and capacity of both municipalities and schools to engage in such projects. It could also be the case, however, that it is simply unknown among the relevant stakeholders.

More than a half of the respondents (staff from 25 primary schools and 10 secondary schools, n=140) stated not to be satisfied with the cooperation with local governments (and other external actors), according to a monitoring exercise carried out by OXO in early 2012. Challenges also persist in motivating business representatives¹⁴ and parents to actively participate in the eco-boards. A worrying sign is also the low level of interest of Albanian-majority municipalities, where e.g. no school applied for a Green Flag award.

Another output, namely the software to measure the energy efficiency footprint, is considerably delayed for technical / programming reasons (but scheduled to be finished in 2013). Even though of secondary importance, this tool might have contributed to better assess the actual effects of the environmental activities and might as such have been useful as a “selling argument” vis-à-vis the municipalities.¹⁵

Outcome 4: Public awareness on environmental issues is increased

The project has been delivering a host of public awareness / public relations activities in print and electronic and social media, hosted press conferences, issued project newsletters – and has been reporting extensively about the latter in the five interim reports. The web portal of the project (www.nrp.org.mk) is informative and its design appealing; both comment hold true for the newsletter too.

¹⁴ An awareness campaign targeting businesses is scheduled to be implemented in 2013.

¹⁵ It should be assessed whether the existing tool ExCITE (<http://eeopstini.mk>) can serve the purpose of the energy efficiency software foreseen to be developed under the project. ExCITE, developed by UNDP and launched in 2011, is an application to calculate energy performance of public buildings.

A prominent element of the public awareness activities is the children show “5+” that is aired weekdays in Macedonian and Albanian language. While the TV show is a separate product of OXO, it provides the platform for specific activities financed by the project, such as cartoons with specific environmental protection related content (for instance: energy saving, water saving, plastic or „*Healthy food for healthy childhood*“). Community based activities such as the national action days, the eco-campaigns or the young reporters have equally been mentioned as important elements of the project’s public awareness activities.

Other activities that have been receiving public attention are the Green (Silver and Bronze) Flag awards to schools and kindergartens for their environmental management¹⁶ or the small scale grants for energy efficiency investments.

It is difficult to assess, let alone measure, the actual achievement of this outcome – not least against the resources available for this assignment and the non-existence of a benchmark. Nevertheless, the interviewees were commonly of the opinion that the work of the project “improves” public awareness but could not assess to which extent and in which particular form. On the other hand the interviewees regularly gave “anecdotal evidence” of children, who remind their parents and siblings to turn off the lights and running water, to close windows or recycle waste. School principals and teachers reiterated that students have become more confident and vocal in terms of their concerns for the environment and school facilities cleaner and more orderly. Students, even though they may have already been interested in the topic, are now being offered the platforms and opportunities to actively engage themselves (as young reporters, eco-board members or in eco-actions). It also emanates from the interviews that the project helped in several instances improving collaboration between schools and municipalities and in bringing different stakeholders at local level at one table to discuss environmental issues.

Outcome 5: Incorporation of specific knowledge into Macedonian schools through interaction with the international eco-school network

The project facilitated the participation of more than 80 schools in international contests in the field of environment, which not only provides students with an opportunity to apply and present their knowledge but also underpins schools’ motivation to participate in the eco-school network. Study visits to Turkey, Malta and Romania offered teachers and students alike the opportunity to network and learn from peers abroad. There are contacts with eco-schools, *inter alia*, in Serbia, Spain, Poland or Kazakhstan. The web portal and en email-distribution for networking purposes at national level is reportedly frequently in use. A particular achievement

¹⁶ Some schools market their Green Flag actively in the internet, for instance: <http://www.projectearth.net/Project/Details/2707>; <http://www.aerodrom.gov.mk/detailed-education-news/items/within-the-program-integration-of-environmental-education-in-the-macedonian-educational-system-goce-delcev-primary-school-got-a-.html> (last accessed on 31.12.2012).

for OXO and recognition of its work has been the granting of full membership to the Foundation of Environmental Education (FEE) in summer 2012.¹⁷ OXO is now official FEE representative in Macedonia and the fourth organisation in South-Eastern Europe that received this status (apart from organisations in Bulgaria, Croatia and Serbia).

Conclusion:

Overall, the evaluators conclude that the project has been performing well and that the key outcomes and outputs will be achieved by the end of the project. However, we also note that a number of activities have hitherto not been completed. Even if they are being delivered until August 2013, they will likely have little impact. Examples include: implementation of the 50-50% scheme; energy efficiency footprint manual and software. The biggest challenges remain in the field of engaging municipalities in the programme implementation and in ensuring that the MoES arranges for sufficient resources to manage the programme beyond 2013 (as discussed further below).

4.2. Specific Evaluation Questions

In the following we wish to respond to the specific evaluation questions regarding project approach and management as well as institutional issues.

General observations in terms of project management:

The tasks and responsibilities of the respective project stakeholders were defined in the Project Document; they are the starting point of the analysis of the programme implementation. In addition, the project concluded a series of memoranda of understandings with different institutions that define and delineate roles and responsibilities of the parties. Management procedures were not explicitly agreed upon; the collaboration between the stakeholders continued on the basis of past experience and practice and developed over time. The project governance rests mainly on the Steering Committee and the Operational Team. The latter convened three times, yet reportedly not with the participation of the Centre for Vocational Education (CVE). Project management responsibility was progressively transferred from OXO to the MoES, more concretely to the Programme Coordinator, mainly as regards functions of administration, communication and coordination. However, OXO continues to be closely involved in operational matters and in terms of content we conclude that OXO still carries most responsibility. This does not come as a

¹⁷ The Foundation for Environmental Education (FEE) is a non-government, non-profit organisation (registered as a charity in England) promoting sustainable development through environmental education. It is recognised by different United Nations institutions/programmes such as the United Nations Environmental Programme or the United Nations Educational, Scientific and Cultural Organisation. More info on: www.fee-international.org.

surprise, given that the Programme Coordinator operates solely and can only rely on occasional support from her colleagues in the MoES.

Performance and engagement of MoES and BDE:

According to information received it emanates that senior staff in the MoES fully supports the project and the Programme Coordinator and lives up to its commitments. (Nonetheless, the Project Coordinator does not appear to be fully associated with the MoES / perceived as a state employee by her co-workers but merely a project staff, which might be a sign of the (still) insufficient institutional internalisation of the project.) An issue that hitherto could not yet be resolved, on the other hand, is the position of the Programme Coordinator. She continues to be employed on a one-month renewable contract basis. There are reportedly administrative impediments but also – presumably – the fear that the appointment of the current Programme Coordinator cannot be assured if the position is advertised in an open call. The employment situation had no ramifications on the performance of the Coordinator hitherto but is a matter of concern in the event the project is extended and/or if there are changes of senior management in the MoES.

The information we collected suggests that the collaboration between OXO, the MoES and the BDE gradually developed over time and has now reached a level with which all parties appear to be exceptionally satisfied with. To the extent it is possible to grasp this during a short-term mission, there seems to be a supportive working relations among the stakeholders.

The difficulties that the project experienced in terms of collaboration with the BDE, which resulted in delays regarding the teaching material, were eventually overcome and has gained momentum ever since. Cooperation has been realised with regard to the review of school/kindergarten annual plans and the inclusion of environmental education activities – though reviewing annual plans itself is anyway one of their responsibilities – or the distribution of teaching material throughout the country.

Several interviewees commended the decision of transferring project responsibility to the MoES with which the project received a “formal and authoritative” character. With its decision to include the eco-standards into its school appraisal system, also the SEI provided an additional and instrumental push to implementation. Without either of these measures many opine that only the most motivated teachers would actively engage in the programme delivery.

Performance and engagement of municipalities and the Association of Local-Self Government Units (ZELS):

The project started to shift more attention to municipalities in the second half of the implementation period and underestimated the time needed to enter into discussions and negotiations with the municipalities. From our discussions we conclude that municipalities still lack an understanding of the potential benefits of the project activities for their development. Not surprisingly the interviews reveal that the level of engagement of a given municipality rests, mainly, on factors of personal

motivation and interest of key officials in the municipalities. In this regard mayors carry most importance and the success of the project is highly related to the perceived interest of the mayor her/himself. The project thus needs to be “marketed” in a way that meets their specific interests. ZELS, likewise, has not been involved to a sufficient extent by the project. The Association reiterates to offer its support, e.g. in facilitating training events for municipal officials. The potential of ZELS to “*make municipalities participate*” should, however, not be overestimated.

Institutional issues and processes:

Several factors contribute to the good collaboration, above all at central government levels: Environmental education is a benign, hardly controversial topic and not prone to be worn down by politics. Moreover, it is a topic that provides the implementing agencies with a positive image, an image of responsibility. The project required generally relatively little direct investment from and did not cause any major challenges to the MoES or the BDE. Personal and intrinsic interests of senior personnel in the MoES, who were able to pull strings and push the agenda of the project forward, proved to be beneficial for the project.

Cooperation among the main project stakeholders is little formalised but often spontaneous – which, however, did not significantly affect the quality of the cooperation and is, possibly, a sign of good working relations. Cooperation between the public institutions is less intense and is generally prompted by the project – OXO or the Project Coordinator respectively.

Engagement of the backstopping agency:

The *Pädagogische Hochschule Zürich* (PHZ) has been delivering backstopping services since fall 2010, which took the form of two personal encounters per year and regular email and phone contacts. The PHZ provided expertise, for instance, in the development of selected teaching materials and a self-assessment tool for eco-schools. The backstoppers also extended support in terms of project management and monitoring and facilitated a study visit of the Operational Team (OT) to Zurich. In the past twelve months the PHZ consulted OXO mainly in regarding organisational development, for which a specific assessment tool was developed.

Visibility of the project:

The project receives good attention in all major media in Macedonia, which is partly facilitated by the established contacts of OXO with two important media outlets. Project deliverables (training material, manuals, etc.) usually feature the Swiss ensign and make reference to Swiss support. Our experience during the field mission was mixed as regards perceived “ownership” of the project: a majority of the interviewees (mainly teachers) referred to it as the OXO project, some called it the MoES project; few occasionally mentioned it to be a Swiss funded project.

4.3. Efficiency

Efficiency measures the outputs and results of a project in relation to the inputs that were invested. It assesses the extent to which the least costly resources possible were used in order to achieve the planned results.

The evaluators suggest assessing efficiency by identifying processes and actions that illustrate the extent to which OXO undertook to achieve the desired results at minimised costs and the least costly resources possible. The assessment of the efficiency is therefore largely based on the document review and information that was obtained from the interview partners. The following processes and actions could be identified:

- *Local contractor and local experts provide services:* The project is implemented by a Macedonian organisation and local staff members. Specific international expertise was sought only for backstopping purposes and as regards OXO's membership to FEE. There is widespread agreement amongst the project stakeholders that the service provision by the local partners – due to reduced staff cost, ease of communication and contextual knowledge – is a key factor of the project's efficiency. The cost per training participant can serve as indicator in this regard: In the course of the project some 1'370 school/kindergarten staff and students of pedagogy benefited from training inputs with the associated cost amounting to about CHF 233'000 (excluding project staff cost). The cost per training participants thus amounts to CHF 170, which we consider to be a good ratio compared to similar type interventions.
- *Quality, timeliness and transparency:* The quality of the services rendered by the project is considered to be high and several interlocutors mentioned the diligence and transparency of OXO staff in terms of communication, coordination and resource utilisation. Problems that arose during implementation were hitherto communicated clearly and remedial action was taken wherever possible. The project did not experience significant delays that would have had ramifications on the overall performance of the project, even though some activities such as the software development are considerably behind schedule. On the other hand the efforts to enhance collaboration with the municipalities would have required more resources and should have been planned earlier than in the second half of the project.
- *Flexibility during project implementation:* OXO has been vigilant in monitoring the use of resources and reallocating available resources to more efficient activities. The project seized opportunities to improve activities (e.g. as regards to organisation of the trainings following the experience in the first training cycle), to deliver new activities (e.g. the healthy food campaign) and to expand the group of beneficiaries (such as members of the State Education Inspectorate or students at the Institute of Pedagogy in Skopje; inclusion of boarding and private schools).

- *The decision to entirely leave the school-level dissemination of the project goals and possible follow-up activities to the three-member team from each school, while saving much of the resources, carries risks two types of risks. First, it prevents the monitoring of the quality and appropriateness of the dissemination process. Second, in the case of staff fluctuation (teachers, school principals etc.), incoming staff remains untrained and does not officially acquire the relevant knowledge for the project.*

There is room for improvement as regards accessibility of the resources that were delivered under the project to a wider audience and interested groups. Uploading the manuals and teaching materials on OXO's website or the project web site (www.nrp.org.mk) would be a low cost measure that would allow e.g. schools to download the material. (In this context we advise that the web presence of OXO does require better maintenance.)

Overall we believe that the resources – funds, human resources, time and expertise – were largely utilised strategically with a view to achieve the expected results and outputs.

4.4. Sustainability

Sustainability is concerned with measuring the longer-term benefits of an intervention and its continuation beyond the period of donor support. In the context of this project the evaluators differentiate between the environmental education programme *per se* and OXO's sustainability as an organisation, as a specific feature of this evaluation.

- *Environmental education is anchored in normative and quasi-normative acts at central and local government levels:* The decision of the government to make environmental education a mandatory element of Macedonia's education system and the inclusion of environmental education as a governmental short- and medium-term priority under the *National Programme for Adoption of the Acquis Communautaire* (NPAA) are certainly key elements of the program's sustainability. Several elements help sustain environmental education at local level, including the annual teaching plans, which are developed by schools, reviewed by the BDE and approved by municipal councils, and that now feature environmental education. Furthermore, with the inclusion of the four eco-standards into its “integrated evaluation tool” the State Education Inspectorate also contributes to sustainability, given that failure to meet the standards can lead to sanctions. It is reasonable to assume that the normative anchorage that has been achieved over the past years provides for sufficient sustainability of environmental education.
- *Sustainability of knowledge that has been acquired by school personnel and pupils and youth:* School personnel benefited from a series of trainings and engaged into implementing ecology-related actions and projects and pupils across the country acquired knowledge about the environment and associated

challenges. It is difficult to measure but our interlocutors commonly opined and provided anecdotal evidence which indicates that environmental education enhanced awareness and competences of the students and had influence on their values and behaviour.¹⁸ We argue that the project undeniably contributes to teaching a generation of youth that is environmentally more aware and competent.

- *OXO exhibits valuable competence and experience but continues to be in search of its organisational future:* The long-term presence of OXO in the market, its professional and dedicated team members, the existing revenue streams from the 5+ television show, the ongoing SDC project in the Bregalnica River and other small scale projects provide for a good basis for OXO's continuous existence.
- *Other factors that contribute to sustainability:* Many schools that are active as eco-schools wish to maintain that status and will continue to engage in environmental activities and projects; schools that have not yet earned the Green Flag will strive to achieve this award; new legal requirements (e.g. energy efficiency action plans at municipal levels) can contribute to intensify school-municipality dialogue and collaboration.

In light of the above it is reasonable to assume that environmental education *per se* will sustain over a longer period of time, specifically due to the normative anchorage that has been achieved. At the same time its level of implementation and practical realisation remains uncertain.

Several of the interviewees caution that a halt of the project and/or the withdrawal of the MoES from the project's implementation would most likely result in a slowdown of the environmental education programme. They argue that all involved stakeholders still require time to gain more experience and confidence in the implementation of the programme. “Programme champions”, who push the implementation forward, as well as “supervision” are necessary in order to better integrate environmental education in the processes and routines of the education system. Additionally, like in any similar reform and change effort, there are people who need more time to adapt and to appreciate the benefits of the programme – teachers, principals, public officials, and pupils and parents alike. Complaints exist, for instance, regarding the extra effort that the programme brings about, which requires teachers to stay at work later, work during the weekends and work from home – all this being unpaid. This is particularly the case for teachers who act as programme coordinators or eco-board members in the school. If these concerns remain unaddressed, they can have demotivating and damaging effects. It must be noted positively, however, that the project stakeholders did not encounter any obstruction of the programme implementation.

¹⁸ It must be noted that the transition of knowledge (acquired through education) to behavioural change is, generally, difficult to measure and a controversial topic.

Other challenges in terms of sustainability persists, *inter alia*, as regards initial and continuous teacher training in environmental education, harmonisation of the teaching contents and approaches across regions and schools, or availability of teaching materials, particularly for secondary schools. Moreover, there is need to build up more capacity of e.g. the BDE in further developing / upgrading / revising the environmental education programme. Likewise, as stated elsewhere, there are only few persons within the MoES involved in the programme implementation, first and foremost the Programme Coordinator, and much rests on her knowledge and drive. Her position is still not fully secured beyond August 2013 and thus the risk remains that the position is eventually cut. According to senior MoES personnel there is neither a “contingency plan” for the period following the project’s end, nor are there specific budget lines earmarked for environmental education purposes. It is therefore instrumental to involve more people and institutions into the programme delivery, particularly at the local level where environmental education and activities will eventually show effects.

Our recommendations (cf. Chapter 7) are specifically designed to address some of these concerns and to enhance the prospects of sustainability of the achievements to date.

5. Organisational Performance Assessment

The specific evaluation question we wish to address with this chapter relates to OXO’s vision to transform into a *Regional Environmental Education Centre*. In light of the resources at our disposal but particularly considering the work done by the PHZ in the context of its backstopping mandate in December 2011¹⁹, we refrain from carrying out more comprehensive organisational assessment. Our views therefore derive from document review and qualitative interviews with senior staff of OXO.

OXO has been active in the field of environmental education, democracy and civil society development in Macedonia for more than 15 years. Over these years it built up an excellent reputation and visibility and is now considered to be among the leading non-governmental agencies in environmental education in Macedonia – a view not only held by many of our interview partners but also stated in a recent research paper.²⁰

OXO has currently 15 staff with complementary skills, all of which are involved in the main activities of the organisation, namely the production of the 5+ show and the SDC-funded projects. To the extent we were able to assess during our short personal

¹⁹ The Backstopping Mission Report (March 2012) of the PHZ dedicates an entire section to the analysis of the results of a specifically designed tool for organisational planning for OXO.

²⁰ The state of environmental education addressing fifth to ninth grade students in Macedonia, J. Spiroska, Thesis submitted to the Central European University, Budapest, 2010

contacts there appear to be good working relations among the team as well as a strong identification with the organisation, its values and topical focus.

The environmental education programme has been the main source of income and accounts for approximately 70% of OXO's budget. At present OXO continues to be highly dependent on the project. In the absence of similar type alternatives – of which there are none at present – OXO will likely have to cut back its operational cost, presumably by reducing staff. Despite the impending end of the project little has been done to build up alternatives to the ongoing SDC-funded project(s). This is partly explained by time and resource constraints, since senior personnel were heavily involved in the project roll-out. We sensed that there is an unspoken hope that the current project would be extended with renewed funding from SDC.

The main assets of the organisation are clearly related to the programme components such as eco-schools or young reporters as well as the experience of and success in mainstreaming and institutionalising environmental education in Macedonia. Furthermore, there are interests (and expectations) to capitalise on the experience in Macedonia in neighbouring countries (e.g. Albania, Kosovo, Serbia), thereby building up on existing networks as well as contacts with relevant stakeholders in the recent past. The availability of teaching and educational material in Albanian language is seen a particular comparative advantage.

OXO gained full membership of the Foundation for Environmental Education (FEE) in 2012 and is the national level representative in Macedonia. Full membership provides OXO with the unique position of being in charge of implementing FEE programmes nationally.

The combination of these assets nurtured the vision of transforming OXO into a *Regional Environmental Education Centre*, “...an organisation that provides different services in terms of environmental education to a variety of interested parties...” – public and private alike. However, in the discussions OXO was unable to clearly define what exactly such a centre would do or what types of services it would provide (consultancy, research, lobbying?); what organisational or legal form it would have (non/for profit; non-governmental or private?); or how it would finance itself (donor financed?). Also, a thorough analysis of the market conditions in the region has not been undertaken yet.

The plan of building up on the organisation's specific expertise and experience in Macedonia and beyond is viable and should be pursued; the idea to transform into a regional player also merits more attention. Given the limited capacity in the state institutions at central and local levels alike the evaluators believe, nonetheless, that OXO should concentrate first and foremost on its key market in Macedonia – with a view to develop into a service provider to or contractor of governmental institutions at central and local levels. This requires more engagement in terms of strategic planning and business development.

6. Conclusions and Lessons Learned

Summing up our findings we formulate the following conclusions and, general, lessons learned:

- The evaluators consider that the project achieved remarkable results and the project enjoys good reputation among project stakeholders. The technical competence and long-standing experience of OXO as well as the application of an internationally recognised approach provided immense credibility to the project.
- A key feature of the success in institutionalising and mainstreaming environmental education across Macedonia has been the decision to entrust the MoES with the (formal) project management responsibility. This measure gave the project the required authority from which schools (and municipalities) can hardly abdicate from.
- At the same time the MoES needs to ensure that it has the resources and capacity to follow suit, since longer-term support is required to ensure that the successes that have been achieved thus far become deeply rooted in the routines of teachers, school principals, municipal and governmental staff. This is particularly warranted in light of the intended progressive withdrawal of OXO from project implementation.
- The practice of delivering the project in cooperation with and through local partners provides the project, *inter alia* with good access to the project stakeholders and beneficiaries; a more cost efficient means of delivering services; and the opportunity to develop local capacities and skills.
- Assessing the actual (long-term) environmental impact of eco-actions requires thorough data collection and analysis.

7. Recommendations

The following recommendations, most of which come as a result of our intense dialogue with project stakeholders, suggest action that we believe would buttress the ongoing implementation of environmental education, enhance the sustainability of the project's interventions and contribute to OXO's efforts in developing its market in Macedonia and beyond until SDC's withdrawal of support for this project.

Our recommendations are also designed against information we received from SDC senior personnel that a "light extension" is generally feasible. Our internal estimate is that a two year extension with an estimated additional budget of CHF 400'000-500'000 would be necessary to implement our recommendations (also depending on

the balance of the funds of the current phase that could be carried over into an extension phase and the eventual co-financing by the government of Macedonia).²¹

- *Deliver (more) training on the environmental education programme to programme stakeholders beyond the immediate school environment:* The current phase of the project focused on delivering training primarily to school principals, school pedagogues / psychologists and teachers across the entire country. In addition we recommend training be offered specifically to selected municipal staff, institutions that train teacher students, and the in-service training of the BDE.

Municipal staff responsible for education and environmental affairs of all municipalities should benefit from specific training that mirrors the training that school personnel received in the ongoing phase of the project. Such training should contribute to fostering communication between municipalities with their schools but also enable the municipalities both to support schools in their environmental activities (e.g. as regards the eco-clubs, the Green Flag award or energy efficiency investments) and to supervise schools in terms of their environmental educational teaching programmes (e.g. drafting and implementation of annual schools plans).

Deliver training to **Institutes of Pedagogy** and other institutions that offer formal teacher training: this measure should help ensuring that young teachers are better prepared to deliver environmental education in schools and, in the long-run, contribute to harmonising the national teaching approach to environmental education. Furthermore, this approach should help that young teachers do not see environmental education as “yet another additional task” but an integral element of their professional assignment.

Training of BDE’s Teacher Professional Development Sector which provides **in-service teacher training**: This recommendation is closely related with the previous one and aims at ensuring that environmental education will be offered to teachers continuously – ideally as a standard / accredited course – after the project ends. The feedback we received from different stakeholders, including the BDE, suggests that at this stage the BDE itself does not have the required capacity to design and deliver quality training in this field.

A suggestion from one of the interviewees, which however would necessitate more research, is to work on including a module on environmental school management into the **professional exam of school principals**, thereby

²¹ A key part of the budget would refer to training: on average a two-day workshop under the current phase amounts to CHF 350 per workshop participant. With a budget of CHF 150'000 more than 400 individuals (municipal staff, members of the academia, MoES personnel) could participate in training on environmental education and the specificities of the project.

contributing to raise the level of acceptance of environmental education. The responsible body for such an intervention is the State Examination Centre.

We recommend, based also on the feedback we received, that non-formal ways of education (e.g. workshops, seminars) are utilised rather than attempting to change the formal syllabi / curricula of teacher training institutions in Macedonia, which would require considerably more time and resources.

- *Collect and disseminate information on good practices:* One of the concerns that teachers voiced (particularly the ones who do not have a background in natural sciences) was the difficulty to integrate environmental education topics into specific subjects. At the same time there are creative and innovative examples from which others could learn; there is, however, no **platform that disseminates good practices**. We thus recommend that OXO – for instance in collaboration with the BDE or an Institute for Pedagogy – collects and spreads these good practices, which could also be organised in the form of a *blog* or *Facebook group* that OXO moderates (though the feasibility and acceptance of such an approach by teachers would have to be assessed).
- *Upload electronic versions of handbooks and manuals etc. for teachers and school principals:* Based on the finding that some educational institutions have not received all didactical materials and many react on the insufficient number of copies in the school, efforts of uploading them online (or at least providing each teacher with electronic copies via email) should be beneficial for creating a common starting point for all.
- *Engage in a more strategic collaboration with ZELS:* In the current phase of the project there has only been occasional collaboration with ZELS and even more so only in the recent past. During an eventual extension phase OXO should engage in a **more strategic collaboration with ZELS**, particularly as regards the delivery and facilitation of training for municipal staff and the dissemination of good practices on environmental education across municipalities.
- *Consider collaboration and/or backstopping support by relevant actors from Switzerland:* With the exception of the *Pädagogische Hochschule Zürich*, which mainly focused on backstopping the project implementation, no other Swiss expertise has been deployed. There are, however, potentially **interesting organisations in Switzerland** that should be considered for specific technical inputs (e.g. in terms of non-formal teacher training or good teaching practices). Organisations to be mentioned include, for instance, *Stiftung Umweltbildung* (with whom there has been contact on the occasion of a study visit to Zurich and who confirmed to principally be open for collaboration, internal strategy and availability of resources permitting) or *Forum Biodiversität*.
- *Support OXO in presenting its experience and knowledge in neighbouring countries:* Over the past years there have been occasional discussions,

including within SDC, about implementing the environmental education intervention in Macedonia's neighbouring countries – particularly Albania and Kosovo, where there is apparent interest in similar type programmes. With a view to support OXO in positioning itself as a potential implementing agency and advisory service on environmental education it is suggested that **SDC facilitates meetings** in these countries that provide OXO the opportunity to present its experience, services and products to relevant government agencies.

- *Support OXO in its organisational change effort:* OXO has been benefiting from backstopping and organisational development support over the past years. There are many ideas of what the organisation *could* do but little vision of what it *will* do, particularly after the end of this project. Developing a clear organisational strategy and operational plan – with the support of an experienced consultancy that possesses specific expertise, including local expertise – should be beneficial for OXO in this regard. We suggest at the same time that only part of the costs (40-60 %) of external support is paid by SDC and that the remainder would have to be paid by OXO. With this measure senior personnel of OXO would need to determine how much it is ready to *engage* in such a process and how much it is ready to *invest* into revamping and reorienting the organisation.

In the event SDC takes the decision not to extend the project, we argue that the following recommendations should be taken into consideration:

- *Extend the implementation period of the project to allow all participating municipalities to take part in the full set of project activities:* The current planning foresees that the project ends in August 2013. This would foreclose those schools that commenced implementation of the seven-step change process in 2012 to be benchmarked with a view to receive the Green Flag and be able to apply for a grant for a small capital investment. Denying these municipalities "equal" treatment carries the risk of undermining the commitment of institutions in these municipalities and damaging the reputation of the project and/or of OXO and the MoES as key implementing agencies. Against this background an **extension until June 2014** is recommended. A detailed cost assessment and expenditure projection, associated with a review of which activities are still reasonable to be implemented, should provide the necessary information to determine the feasibility of shifting budget lines that would make possible an extension without extra budgetary means. Another point should play in favour of a non-cost extension: the decreasing project involvement of OXO in 2013 and the (intended) increasing engagement of the MoES.
- *Develop programme management procedures:* With a view to ensure that the MoES and (and other pertinent government institutions) are fully equipped with the knowledge and skills required to continue e.g. the eco-school component of the project is instrumental that management procedures are

developed. Training of the MoES and other institutions such as the MoEPP in the application of the procedures are similarly recommended. Closely related to this is the planned production of a toolkit of the entire programme. The toolkit is still pending its development and should become a priority task in the first half of 2013.

- *Review the pending work programme with a view to utilise resources where they yield most return:* We recommend that the remaining work programme until August 2013 is reviewed to identify activities that merit priority. Decisions should be made to cease activities that will likely not yield particular results (e.g. energy efficiency software) so that the respective budgets can be reassigned (eventually also for the extension phase until June 2014).

Any continuation or extension of the project also necessitates entering into discussions with the MoES (and eventually other governmental bodies) regarding the (co-)financing the programme implementation. At present the MoES has reportedly not earmarked funds for the continuation of the project beyond August 2013. In order to mitigate the risks that the current Programme Coordinator eventually leaves her position in search for other opportunities, the future of her current position should also be clarified as soon as possible.

In terms of project delivery we recommend that the MoES continues to take the leading role whereas OXO acts both as a backstopper to the MoES and direct implementer of certain activities.

Annex 1: Drivers / Restrainers

In the following we present what we believe are important drivers and restraining factors of the project. These observations respond to the specific evaluation questions in the ToR and complement our views in the main body of the text (cf. Chapter 4.2).

Drivers:

- The main driver of the activities is still OXO and the project is still perceived by many interlocutors as an OXO project – a conclusion we draw on the basis of several interviews. OXO is a recognised institution and has established itself as one of the main pillars of environmental education expertise in Macedonia – a fact that also leads teachers to accept and make use of the educational material designed by OXO.
- Several environmental topics have become pressing policy issues, energy efficiency in particular. This is a factor that contributes to perceiving the project activities as contributing towards achieving certain general environmental goals.
- The competitions between schools (e.g. Green Flag award, different quizzes etc.) appear to be motivating schools to work on improving their eco-management and meeting the eco-standards.
- The fact that the Project Coordinator is placed in the MoES and communicates with schools in the name of MoES is a very important element for schools to adhere to the assignments and an important driver of timely implementation of activities. Hence, a large part of the project sustainability rests on this position.

Restrainers:

- We perceive a low level of awareness of municipalities regarding the relatedness of the project goals with issues they face and for which solutions are needed. For instance, many municipalities have problems with waste management or water supply, but do not see the eventual benefit of supporting schools in activities, which contribute towards solving these problems.
- Many teachers also have insufficient environmental awareness, since they have not been trained on these issues specifically. Only few received training in the frame of the project and it cannot be established with certainty how and to what extent the training contents were disseminated in the respective schools. While we understand that teachers do not object the project goals and activities *per se*, insufficient understanding of their role and potential contribution can be considered as an

impediment. Since the inclusion of eco-topics is a new obligation, there are teachers who consider this as a burden that adds to their already existing administrative tasks.

- Information that we collected suggests that the BDE is not *wholeheartedly* involved in the realisation of the project. We consider this to be an impediment, since it is the main advisory body for teachers and professional school staff regarding the realisation of classes, including the integration of new topics and methods of addressing them.

In this regard, the BDE develops the assessment standards for each subject, which contains the specific goals of the instruction and the expected results (what students should acquire in terms of knowledge, skills, values etc.). A revision of the standards *might* be necessary in order to determine whether the goals and results outlined by the project are (sufficiently) included in the assessment standards, because teachers should assess the students on the basis of them. Hence, only including the eco-topics in their annual and daily plans may not be sufficient if teachers do not assess the students on these issues. (Students learn what they are being assessed for.)

- Since the focus of the previous project phases (in the frame of "*We don't have a spare planet*") were more focused on younger children, it is uncertain how much the current project has managed to shift to address the needs of older ones (secondary schools). Hereby we refer to selected feedback from training attendants from secondary schools regarding the unsuitability of the materials for secondary school students and it was noted by the BDE that the secondary schools are less involved; also, secondary school teachers have evaluated training slightly less positive than teachers from primary schools and kindergartens. We do not have more data on this but we reckon that this is an issue worth investigating and eventually addressing in the following phases.

Annex 2: Glossary

Eco-school	An eco-school aims at empowering students in relation to environmental issues by engaging them in action-orientated learning. Evidence of success in these areas will eventually lead to a school being awarded a “Green (Silver / Bronze) Flag”.
Eco-standards	The four eco-standards in Macedonia are: saving energy, saving water, maintenance of the school building, environmental and well-arranged yard. Each standard has a specific goal that is to be achieved with a set of actions and associated indicators. Fulfilling the standards should yield results in terms of improved environment or cost reductions.
Green (Silver/Bronze) Flag	A “Green Flag” is an acknowledged symbol for environmental excellence. It is awarded to schools that implement the seven-steps. Schools not meeting the Green Flag status receive the flags in silver or bronze.
Seven-steps (method)	Each school follows a seven-step process and empowers their pupils / youth to lead processes and actions wherever they can. The seven-steps shall lead, over time and through commitment, to improvements in the learning outcomes, attitude and behaviour of students and the local community and ultimately the local environment.

Source: Most terms are taken from the website of the Foundation for Environmental Education (www.see.org) who is initiator / owner of the project.

Annex 3: Terms of Reference

TERMS OF REFERENCE FOR THE MID-TERM REVIEW OF THE PROJECT

“INTEGRATION OF THE ENVIRONMENTAL EDUCATION IN MACEDONIAN EDUCATIONAL SYSTEM”

Scale-up Phase (Jan 2010 – Aug 2013)

1. BACKGROUND

1.1. Context

The introduction of environmental education to the children of pre-school, primary and secondary school age is a particular challenge to the Republic of Macedonia, since the transition of the society has brought some difficulties in the realisation of a quality syllabus, especially in the modern curricula. Unfortunately, in the late 90s, considering the difficulties of the transition period, environmental education was not at the top of the government's priority list. The Ministry of Education and Science (MoES), the Ministry of Environment and Physical Planning (MoEPP), municipalities and local NGOs were making efforts to improve the status of environment in the country, but the main problem they faced was the citizens' behaviour and lack of awareness.

Macedonia is currently going through the fiscal decentralisation process, meaning that the municipalities obtain block grants from the central Government for financing activities under the decentralised competencies, including primary and secondary education. With this process, among other changes, the ownership of the schools has been transferred to the municipalities and the financing of school activities is defined as a shared responsibility of the state and the municipality. The Bureau for Development of Education (BDE) and the Centre for Vocational Education (CVE) from the MoES, are the main responsible bodies for curricula design and pedagogic improvements, while the municipalities together with the schools have also a limited level of flexibility in the implementation of the curricula. The new situation offers on the one hand opportunities for the municipalities to be actively involved in the education process, but on the other hand, mainly due to lack of financial resources and human capacities, the municipalities have limited capacities to make bigger moves or actions.

In January 2009, the MoES submitted a Notation to the Government with a request for setting environmental education as a priority. This Notation of the MoES was adopted by the Government of Macedonia and this made it possible for the ministry to address the implementation processes and all other related measures such as starting the process of integration of the environmental education in the existing curricula, establishment of accreditation procedures, support to projects for awareness raising in schools, etc.

The donor community in Macedonia is not very active in the area of curricula reforms, and especially not in relation to environmental education curricula. The Austrian Agency for Development (ADA) supported the translation and adaptation of the "Green pack" and "Green pack junior" project for didactic materials and dissemination throughout the country. The support also included training of teachers, but ac-

cording to the results of evaluations previously conducted by the Swiss experts, the application and use of this set of didactic materials in the schools is rather limited.

1.2. History of the project implementation

The Environmental Education project (We don't have a spare planet) is a project of the local NGO OXO financed by the Swiss Agency for Development and Cooperation (SDC). This project is based upon findings of the Pedagogical Faculty of Skopje and the Bureau for Development of the Education (BDE), on the influence of ecology on the everyday life of people, particularly children.

SDC has supported five phases of the programme "We don't have a spare planet". In the first two phases (2002 - 2004) the support was mainly focused on financing production of eco-didactic materials (calendars and manuals for teachers) that were distributed in all 340 primary schools in Macedonia. The third phase (2005 - 2008) included more ambitious goals: establishing of eco-schools network in Macedonia, implementation of eco-projects (small projects financially supported by the programme for resolving environmental problems in the schools or in their surrounding), inclusion of environmental education as a compulsory curricula in the primary schools, development of collaboration of schools with the municipalities and business community, conducting campaigns for public awareness, etc. The results of the external evaluation of this phase (March - June 2008) confirmed that all the defined goals and objectives of the programme were achieved and all involved stakeholders expressed their satisfaction of involvement in the programme and of its impact on the behaviour of pupils, teachers, parents, schools principals, municipality administration, etc. The activities undertaken within the eco-projects did not only create awareness about environmental issues, but also allowed development of new skills for the teachers and pupils regarding basic project management, active citizenship, communication, mobilisation, fundraising, etc. Another large success of the programme is that interethnic relations were mainstreamed through the joint work of children from different ethnic communities - Macedonian, Albanian, Roma, and Turkish - on issues excluding the question of ethnicity and thus reducing the risk of tensions and misunderstandings.

In September 2008, the phase for possible scaling-up of the programme started throughout the country. Since then, there were 85 active eco-schools in 17 municipalities, while 85 teachers were trained for eco-school activities. In order to assess the results and approaches of that phase and to give directions for future actions, a review mission was conducted in June 2009. The recommendations of this review were mainly grouped in three sets of changes required for full scaling-up: content, structural and process adaptations. For planning of the new phase of the programme, SDC decided to follow the three main recommendations: a) to involve the MoES as the leader in the process of introduction of the environmental education through integration in the existing compulsory curricula in the primary and secondary schools, b) to shift the role of OXO from a "principle" programme implementer to a "consultancy and supporting" actor and c) to establish two project bodies: the Operational Team (OT) and the Steering Committee (SC).

The new (fifth) phase started in January 2010 and originally was planned to last until end of August 2013 covering three academic years. In July 2012, an extension until end of 2015 and a budget increase have been approved upon additional project activities. These project activities are focused only in the basin of the River Bregalnica, as part of a large and comprehensive Swiss funded programme for integrated sustainable management of the water and natural resources in this basin. However, the objectives

and the planned activities defined in the project extension are not subject of this Mid-term review and they will be not assessed by the Consultant.

This new/fifth phase of the programme implementation comprises significant changes in the strategy and approach:

Project strategy: The main implementer of the programme is the MoES, while OXO shifted from the "leading role" to a support and assistance role to the MoES. The management of the programme is transferred gradually to the MoES during the programme's implementation. The involvement of OXO (trainings, creation of didactic materials, transfer of knowledge, school networking locally and internationally, organising eco-summits, monitoring, evaluation and reporting, etc.) decreases during the project implementation and in the end of the project, the MoES (BDE, CVE and the State Education Inspectorate (SEI)) shall completely take over the management of the programme and shall continue to work according to the management strategy established in these three years.

The role of the schools' principals is proactive through the overall management and support of the activities related to the environmental education and through motivation of other staff members in the schools, apart from the eco-teachers. Also, the municipalities and ZELS (Association of the Local Self-government units) play an important and active role, as well as the Institute of Pedagogy.

OXO re-orientation: After scaling-up and handing over its core programme to the MoES, the NGO OXO intends to transform itself into a Regional Environmental Educational Centre with the main objective to promote and disseminate the knowledge and experiences throughout the region and to further develop environmental education. During this phase, SDC will support OXO in its institutional re-orientation.

Project organisation: The Operational Team (OT) is responsible for all operational tasks. This body consists of one representative from the BDE and the CVE (MoES), one new employee installed at the MoES (project coordinator) and one from OXO. Due to the lack of human and financial resources, the Ministry was not in the position to entirely dedicate itself to the implementation of the project. Therefore, the project engaged one full-time Coordinator within the MoES with designated responsibilities: to keep the link between the MoES and other involved institutions, the BDE, the CVE and the SEI on the one hand, and OXO, the municipalities, ZELS and the schools, on the other hand.

Implementation: The first half of 2010 was used to perform all necessary activities in order to enable integration of the environmental education in the existing compulsory curricula. Until May 2012, the staff from all educational institutions in the country: 52 central kindergartens, 360 central primary schools and 100 secondary schools participated in the trainings and the conditions for practical application of four eco-standards were established. In the academic year 2012/2013, for the first time all these schools will fully apply the programme on environmental education in their educational activities.

In order to assist in steering the process, Swiss Backstoppers are involved during the entire project implementation period.

2. OBJECTIVES OF THE MID-TERM REVIEW

The main objective of the Mid-term review is to assess, to which extend the objectives of this phase were already achieved. The overall question is: Has the institutionalisation of the environmental education in the Macedonian educational system

contributed to an improved environmental status, as well as to better life conditions in the Republic of Macedonia? It is also expected that this review provides recommendations on eventual modifications of the current project implementation approach, as well as additional interventions deemed necessary to achieve the project objectives.

More specifically, the Consultant team shall review the level of achievement of the following project objectives:

- a) Introduction of the environmental education in the existing compulsory curricula of all primary and secondary schools and kindergartens;
- b) Improvement of the schooling and environmental conditions in the kindergartens, primary and secondary schools;
- c) Strengthened managerial, institutional and educational capacities of the stakeholders;
- d) Increased public awareness on environmental issues;
- e) Incorporation of specific knowledge in the Macedonian schools, gained through interaction with the international eco-school network.

The Consultant Team will also assess the project approach and management, including:

- the performance of the MoES and the BDE regarding the project management and engagement; how they deal with their role, what were their interests, why these interests appear;
- institutional process: who are the drivers and restrainers and what where their interests; does the success and continuation of institutionalization depend on a few leaders or is the process well established in structures on national and local levels;
- the performance and involvement of the municipalities and ZELS in the process, their role, interests;
- the performance of OXO and assessment of its capacities for transformation into a Regional Environmental Education Centre and for eventual future interventions;
- cooperation between the stakeholders: how was supposed to work and how actually worked;
- the visibility of the project.

3. METHODOLOGY

The methodology of the Mid-term review shall include, but does not have to be limited to:

- Review of the main documents related to this project:
 - Cooperation Strategy Macedonia 2009 – 2012;
 - Credit Proposal for the Introduction of Environmental Education in Macedonian Education System;
 - Project Document
 - Narrative semi-annual Reports for the period from January 2010 to June 2012;
 - MoU with the MoES and Amendment;
 - Agreement with OXO and Amendment;
 - Backstoppers' reports;
 - other relevant documents.

- Initial briefing at the beginning of the Mid-term review with the Programme Manager Macedonia in SDC, Bern; initial briefing at the beginning of the Mid-term review and debriefing at the end of the field visit with the management of the SCO Macedonia and the National Programme Officer in charge of the project;
- Interviews with:
 - representatives of the MoES, BDE, State Education Inspectorate;
 - Ministry of Labour and Social Affairs;
 - ZELS and municipalities;
 - schools' principals, parents, pupils;
 - Institute of Pedagogy;
 - Backstoppers in Switzerland.

It is expected that the Consultant team prepares and submits to the SCO an outline of the methodology to be applied, as well as a tentative list of questions prior the field visit to Macedonia. The list will be finalized in discussions with the SCO.

4. DELIVERABLES

The Consultant team shall deliver a comprehensive draft and a final Mid-term review report, containing findings, lessons learnt and recommendations for future actions, of maximum 20 pages (plus annexes).

5. TIMEFRAME

The Mid-term review will be carried out during November 2012.

The total number of days for this engagement is maximum 17 for the Swiss Consultant and 8 for the local Consultant.

The following table gives an indicative overview of the timeframe of this review task. The exact time allocation is subject to negotiations between SCO and the Consultant team prior concluding the contract.

<i>Task/Activity</i>	<i>Number of days in CH</i>	<i>Number of days in MK</i>
Swiss Consultant		
Preparation: analysis of relevant project documentation;	3	
Field work (including travel to and from MK): visits, meetings, interviews		7
Reporting	7	
Total	10 days	7 days
Grand Total:	17 days	
Local Consultant		
Preparation: analysis of relevant project documentation;		3
Field work (including travel to and from MK): visits, meetings, interviews		5

Reporting		0
Total		8

The draft Mid-term review report is to be submitted to the SCO at the end of the 15 working days after the field visit to Macedonia.

The final Mid-term review report is to be submitted to the SCO not later than 7 days after the feedback to the draft report given by SDC.

The Consultant team is responsible for the logistic and administrative organization of the mandate. The SCO will assist the Consultant team in scheduling meetings and interviews with the project partners.

6. ROLES AND RESPONSIBILITIES

The Consultant Team

The Consultant team will be consisted of a Swiss expert selected by the SCO with assistance of the SDC HQ and a local Consultant selected by the SCO. The Swiss Consultant will have the overall responsibility for the review process and reporting. The Consultant team will be in close communication with the SDC National Programme Officer (NPO) in charge of the programme and the Project manager of OXO. As a result of this mission, the Consultant team will deliver a Mid-term review report with findings, lessons learnt and recommendations for future actions.

SCO and OXO

SCO will manage the administrative aspects of the consultant including contract and payments and provide guidance on any major issue they may have during the review. OXO will assist the Consultant team in all logistic matters during the review assignment, as well as in the preparation of the agenda and will accompany the Consultant team in the field visits, if required by the Consultant team.

7. BUDGET

The detailed budget will be prepared by the SCO. Funds shall be taken under the actual credit proposal no. 7F-02079.05.

8. LIST OF REFERENCE DOCUMENTS

- Cooperation Strategy Macedonia 2009-2012;
- Project Document;
- CP on Introduction of Environmental Education in Macedonian Education System;
- Narrative Reports for the period from Jan 2010 to June 2012;
- MoU with the MoES and amendment;
- Agreement with OXO and amendment;
- Backstoppers' reports;
- others.

Annex 4: Interview Guidelines

Basel / Skopje, 14 November 2012

Evaluation: Integration of Environmental Education into the Macedonian Education System

Dear Madam or Sir,

The Swiss Agency for Development and Cooperation (SDC) commissioned us to perform an external review of the environmental education project in Macedonia.

The project, implemented by the non-governmental organisation OXO, has the objective to firmly integrate environmental education into the Macedonian school system. The current phase started in January 2010 and shall be completed by the end of August 2013.

The main objective of the mid-term review is to assess to which extent the objectives of the ongoing phase were achieved as of yet. In addition, the evaluation shall shed a light on the project approach and project management and we shall provide recommendations for eventual future interventions.

The review is based on an examination of project documents as well as information and data that will be collected through a series of semi-structured interviews. The interviews will include a set of pre-formulated questions but also new questions will be brought up during the interview as a result of your responses.

We have approximately 45 to 60 minutes at our disposal for the interview; we will undertake best efforts to maximise the use of the (limited) time.

We do appreciate receiving written documents e.g. a bullet point listing of your thoughts on the project and its performance, including your ideas and pertinent recommendations for “what needs to be done next”; also presentations of your activities and outputs are very welcome.

Finally, we confirm that all data, information and/or (critical) comments we receive from you will only be used for the purposes of this evaluation and will not be shared with third parties.

We thank you already at this stage for your readiness to participate in the interviews. Looking forward to meeting and to discussing your opinion and ideas with you we remain,

With best regards,

Harald Meier and Ana Mickovska-Raleva

Базел / Скопје, 14 ноември, 2012 година

Евалуација: Интеграција на еколошката едукација во македонскиот образовен систем

Почитувани,

Швајцарската агенција за развој и соработка (SDC) не овласти за вршење на надворешна ревизија на проектот за еколошкото образование во Македонија. Проектот, имплементиран од страна на невладината организација ОХО, има за цел да го интегрира еколошкото образование во македонскиот образовен систем.

Тековната фаза започна во јануари 2012 и ќе заврши до крајот на август 2013.

Главната цел на полугодишната евалуација е да се процени до кој степен досега беа постигнати целите на тековната фаза. Дополнително, оценувањето ќе даде увид на пристапот и раководењето на проектот, и ќе ни обезбеди препораки за можни идни промени.

Евалуацијата се базира на испитување на проектните документи, како и информации и податоци кои ќе бидат собрани преку серија на полу-структурирани интервјуа. Интервјуата ќе вклучат збир на претходно формулирани прашања, но и нови прашања кои ќе произлезат во текот на интервјуто како резултат на Вашите одговори.

Имаме околу 45 до 60 минути на располагање за интервјуто. Ќе се обидеме најдобро што можеме максимално да го искористиме ова лимитирано време.

Би ценеле доколку можеме да добиеме пишани документи, како, на пример, кратка листа со Вашите мислења за проектот и неговиот успех, вклучувајќи и Ваши идеи и релевантни препораки за тоа „што е потребно да се направи следно”, како и презентации од Вашите активности и резултати, кои се добредојдени.

На крај, потврдуваме дека сите податоци, информации и (критички) коментари, кои ќе ги добиеме од Вас, ќе се користат исклучиво за целите на евалуацијата и нема да бидат споделени со трети лица.

Однапред Ви благодариме за вашата подготвеност да учествувате во интервјуата.

Со нетрпение ја очекуваме средбата со Вас и дискусијата за Вашите мислења и идеи.

Со почит,

Харалд Мејер и Ана Мицковска Ралева

Annex 5: Interview Questions

Basel / Skopje, 15 November 2012

Integration of Environmental Education into the Macedonian Education System: Questionnaire

This document serves as a *guideline* of the key questions we would like to raise during our interviews and discussions with different interlocutors during our field mission. Consequently, we will not ask the entire set of questions in each interview but will decide which ones to choose depending on the knowledge, experience and role of the interviewee. Given the time limits of our interviews (~45 minutes on average) we will realistically discussed 4-6 questions during a given interview.

Swiss Agency for Development and Cooperation

- What is your overall assessment of the programme implementation thus far?
- To what extent do you believe has transfer of responsibility from OXO to MoES taken place? What are your relevant indicators that lead you to this assessment?
- To what extent had OXO's roles and responsibilities changed since project commencement? Have they assumed an advisory role?
- Has your project management role changed over time?
- Is the programme anchored sufficiently well within the relevant institutions – or does its implementation rest on the shoulders of a few individuals? Which institutions do you consider most committed / supportive / proactive?
- The MoES has long struggled employing the Project Coordinator; does this signify limited commitment of the MoES?
- How do you qualify the work of the backstoppers (PH Zurich)? To what extent have they contributed during programme implementation with technical / operational expertise?

National stakeholders (BDE, CVE, MoES) and OXO

- What are the modes of involvement of your institution in the program activities?
- How do you characterise the process of incorporating the environmental education into the curriculum/schools annual plans? (potential setbacks, problems, success factors)
- Have the schools been instructed on how to include certain topics? How? Where they offered guidelines, mentoring? Please explain.
- According to you, who was most engaged actor in this process? Who was least engaged? What factors triggered the active ones? What factors restrained the passive ones?

- How are schools accepting the new curriculum (=new information, new material, new activities) ? (issues of overburdening, adapting to change, reduced or increased motivation). Do they contact you for assistance? If yes, for which issues/topics/activities?
- (*for MoES*) How much did the problems of employing the Project Coordinator reflect for the implementation of project activities? Please explain.
- (*for OXO*) What was the process of developing didactical materials (used in the program)? (by whom, what was the process, feedback)
- (*for OXO*) Who owns the didactical material – is this copyright of FEE? If so, must updates/revisions of the didactical material occur if requested by FEE?
- Elaborate who (and in which way) participated in the development of guides and manuals for facilitation and implementation of the program.
- How were the environmental standards developed (MoES+BDE+MoEPP+OXO) or other (FEE)?
- How is the process of accreditation (awarding) of eco-schools implemented? What is the role of each actor?
- On the basis of which criteria are the most successful teachers selected?
- Elaborate the capacity building activities: How many people, from which institutions received trainings (including the ToT)? Which topics have been covered? How were the capacity building activities evaluated by the users? (provide data)
- Assess the level of cooperation between the central and local government. Can you give examples of municipalities-outliers and laggards? What do you think are the main factors for this?
- Which role does ZELS play in supporting municipalities? Has ZELS been used sufficiently well as a potential resource of support? Who within ZELS is responsible for education matters?
- Can you assess the cooperation with the BDE, CVE, MoES, and MoEPP regarding: information sharing, approving decisions, supporting decisions, inclusion in the project activities. Also with ZELS and specific municipalities.
- How many hits (daily, monthly) do you have for the 5+ web page? Which activities/topics are mostly visited/used?
- Adopt and eco-school campaign? Elaborate!
- 50-50 program? Elaborate! How much in terms of expenditure could be saved within the 50-50 program since its inception? For what purpose have revenues been used by the schools?

State Education Inspectorate

- How were the new indicators (related to the program) developed?
- How were the schools informed on the new indicators?
- Which methods do you use for assessing the level of achievement of indicators?

- What are the consequences for a school falling short of meeting the (benchmark) indicators?
- How would you assess the preparedness of schools to adhere to the new eco-school principles?

Association of the units of local self-government of the Republic of Macedonia - ZELS

- How are you involved in the program?
- Assess the interest of different municipalities to take part in the activities. What factors influence the most and least successful municipalities?
- What are the main needs of the municipalities with regards to successful project implementation? What do they find most challenging?
- How do you communicate with schools? Is the process standardised? Challenges?
- Have the communal service organisations (and the business sector) been involved in the activities? How? To what extent?
- Does every municipality have a person in charge of the project / member of the eco-board? What is their role?
- How is the monitoring of activities organised?

(for municipalities)

- Does the municipality have eco-project(s) implemented? Explain. What is the role of the municipality and other actors?
- Did you participate in the (management) training for the aims of project implementation?
- How would you assess the involvement of the business sector in the municipality in the realisation of project activities?
- How would you assess the level of information of the citizens in your municipality with regards to the activities conducted? Their awareness regarding environmental issues?
- Do you have information on the number of citizens' complaints/initiatives regarding environmental problems (as compared to the period before the project implementation)?
- How many times have environmental issues been on the agenda of the municipality's council (as compared to the period before the project implementation)?
- Do schools from the municipality cooperate among themselves on issues related to environment? With schools from other municipalities?
- Are municipal (governmental) services in place to e.g. process recycled waste? To what extent have waste management services changed to support eco projects in schools?

Project Coordinator

- Please describe how your role changed over time? How has OXO's role changed over time?
- To what extent are you embedded into the structures of the MoES? Who are your interlocutors, supporters? How is your work influencing MoES policies?
- How is the project monitoring of activities conducted? Who does it, which methods are used? Is the monitoring conducted on a regular basis? How are findings shared with other actors?
- How is teacher performance being monitored? Any surveys, interviews, results?
- How do you communicate with schools? Is the process standardised? Do you experience problems with receiving regular (and detailed) reports from schools?
- Were you involved in the planning and realisation of trainings? Explain.
- Have you had any training in PR & media communication? How would you assess your skills in this regard?
- What are the procedures for including additional institutions (schools/kindergartens) in the project activities?
- How would you assess the level of cooperation of municipalities? Characteristics of most and least involved municipalities?
- Can you assess the cooperation with the BDE, CVE, MoES, and MoEPP regarding: information sharing, approving decisions, supporting decisions, inclusion in the project activities. Also with ZELS and specific municipalities.
- Please assess the communication between BDE-municipalities-education inspectors. Do they coordinate, conduct joint visits, share reports/findings?
- Did the program manage to make interventions in the national syllabuses? If yes, which type of changes? If no, why?

School principals

- What has changed in your school since EE programme implementation? Pupils, teachers, parents?
- Is the programme sufficiently anchored in the institutions to continue its implementation after the project? What needs to be done – by the schools, the MoES, the PI etc. – to ensure its continuation / improvement?
- (*on 50-50 program*) How much in terms of expenditure could be saved within the 50-50 program since its inception? For what purpose have revenues been used by the schools? Are data / time-lines available?
- (*on capacity building*) What were the contents of the management training you received? How do you apply these principles in your everyday work?

Students - focus group

- Have you implemented any eco-projects in your school? Describe what you've been doing.

- Do you think you are learning enough about the environment? What more would you like to know?
- Which topics have you covered so far (as part of the regular classes or extra-curricular classes)? What topic has been most interesting for you? What topic did you find most difficult to understand?
- Do you watch the TV show 5+? How often, what do you find most interesting? What would you change?
- Do you play the interactive 5+ games? What have you learned from them?
- Did you participate in the outdoor classes/activities? What was their structure? What were you doing exactly? Did you learn anything new / gained any new experience?
- Do you apply some aspect you learned about the environment in your daily life? What is it?
- What do you think: how interested are your peers regarding environmental issues? Are they knowledgeable of different issues? If yes, do they behave accordingly?
- How would you assess the interest of your peers for joining the eco club?
- What has changed in the school / your class since the EE programme is being implemented?

School staff-focus group

- How did you incorporate the ecological aspects in the existing curricula? Did you find certain aspects difficult to integrate?
- How did you address environmental issues (in the curriculum and extra-curricular) before your involvement in the program? Have you learned new/innovative methods?
- Were you acquainted with the eco-standards for schools before the involvement in the program?
- Which eco-activities have you included in the annual program? How did you decide on what to include?
- How would you evaluate the trainings for the teaching staff offered in the frame of the programme?
- Do you perceive an increase workload due to the implementation of environmental education in the curricula? [If yes:] Do you feel dissatisfied? Can you think of something that would help to decrease the dissatisfaction (external help etc.)?

Regarding the eco-schools program:

- Have you formed an eco-board/committee? What was the process of forming the board? What are its activities? Results so far?
- What sort of analysis have you conducted regarding the environment? (as part of the 7-steps)
- Which activities have you planned? (as part of the 7-steps)
- Do you have an eco-codex?

- Do you communicate with the international eco network? Which activities have you been involved in so far? If not, why? If yes, what experiences have you gained from the interaction?

Assistance, support:

- How would you assess the overall support of the MoES, BDE, and OXO? Do they visit the school, provide advice if requested. Who is your biggest supporter/mentor in the implementation of project activities (person, institution)? Has this changed over time?
- Who is the driver of the activities? How is the process organised? Who contacts you, monitors, who do you communicate with in case of problems?
- If there wasn't for the external support, do you believe you could perform the activities individually/at the level of school?

Capacity building:

- Which workshops have you attended so far?
- Please elaborate on the usefulness of Manuals, Activity Books, and guides. What do you find most useful, least useful? Why?
- How do you find the illustrations in the educative materials? How do you find the text/its reader-friendly-ness, adaptation to the age of children?
- Do you use the web portal of the program? How useful do you find it?
- (*for the principals*) What were the contents of the management training you received? How do you apply these principles in your everyday work?

Assessment of effects:

- Looking back to before the project started, what can you say changed in:
 - the school's planning of curricular and extracurricular activities
 - your awareness about environmental issues and behaviour about them
 - the children's awareness about environmental issues and behaviour about them
 - the parents' awareness about environmental issues and behaviour about them
 - the look (physical characteristics) of the school
 - the collaboration between the school and the municipality
 - the relations among teachers / pupils / students of different ethnicity
- Do you notice any changes in the level of awareness on behalf of school staff / students with regards to adhering to the eco-standards, other environmental issues? Changed behaviour? Can you provide examples?
- How are the eco-standards integrated in the schools self-evaluation? Please provide examples. How are they being assessed?

Inclusion of external actors:

- Parents: Have you had any workshops with parents on the environmental issues? If yes, what was the feedback?
- Business community
- Municipality
- different NGO's
- Do you cooperate with other schools with regards to the activities? How?

Institute of Pedagogy

- What are your responsibilities in the program activities?
- How would you assess the usefulness of the M&E training
- How are M&E activities performed? Findings?
- Were you involved in the development of materials? What challenges did you encounter?
- How would you rate the overall use of the materials? The awareness of school staff and students?
- Is the programme sufficiently anchored in the institutions to continue its implementation after the project? What needs to be done – by the IoP, the MoES, the schools etc. – to ensure its continuation / improvement?
- Will EE become a mandatory or elective subject during teacher training? Has the IoP the necessary capacities to ensure young teachers are educated to apply the EE programme?

Young Reporters

- Has the participation in the program changed the way in which you think about the environment? If yes-how? What new things have you learned?
- Which new skills have you gained through the participation?
- How many reports have you written? How did you choose the topics? How would you assess their impact?
- What is your assessment on the interest of your peers regarding environmental issues?
- Are they knowledgeable of different issues? If yes, do they behave accordingly?
- Did you receive training on how to write journalistic articles? How did you find the training?

OXO (performance / organisational assessment)

- Relevance, effectiveness, efficiency and financial viability are key aspects of performance and are the key dimensions to organisational performance. Please elaborate on:

- Organisational motivation: history, mission, vision, incentives, strategic objectives, mandate
- Organisational capacity: leadership, structure, human resources and their capacities, finances, programmes/services, infrastructure, technology, inter-organisational links
- Environment: political, administrative socio-cultural, economic, stakeholders
- What is your vision of an REEC?
- What is your USP?
- Do you envision developing into a consultancy / an advisory group, a think-tank, a lobby organisation?
- Do you have a business plan?
- Who should finance your services? Which efforts have you undertaken in terms of financing your services / other income than the SDC project?
- What is your market and where is your market – now and in the future?
- Who are your clients / who should finance your services? How and where do you face competition?

Annex 6: Interview Partners

Stanislava Dodeva	SDC, National Programme Officer
Kristina Kolozova	SDC, Assistant Head of Cooperation
Katharina Stocker	SDC, Deputy Director of Cooperation
Aleksandra Mladenovska-Kostik	OXO, Programme Director
Pece Taleski	OXO, Executive Manager
Elena Ivanovska	MoES, Head of Sector
Zorica Velkovska	MoES, Programme Coordinator
Ajshe Selmani	BDE, Deputy Director
Liljana Samardziska	BDE, Advisor
Branko Aleksovski	CVE, VET Advisor (Agriculture-Veterinary)
Nadica Nikolovska	SEI, Director
Vesna Arsovska-Dinkovska	ZELS, Public Relations Advisor
Wiltrud Weidinger Meister	PH Zürich, Co-Head of International Projects
Violeta Drakulevska	City of Skopje, Sector for Environment
Stevo Temelkovski	MEPP, Deputy Minister
Davor Politov	MoSA, Cabinet Member / PR Officer
Lena Damovska	Institute of Pedagogy, Professor
Katarina Georgievska	REC, Country Director
Kornelija Radanovic	REC, Senior Project Manager
Arijan Toska	MDC-Ti-NET, Executive Director
Zlatko Samardziev	GEF, National Coordinator
Anita Kodzoman	UNDP, Programme Officer

Zoran Aleksov	Shtip, Mayor
Vane Manevski	Shtip, Associate for Education
Vlatko Panov	Shtip, Associate for Environment
Redzep Hamiti	Gostivar, Education Inspector
Maja Anastasieska	Gostivar, Associate for Environment
Ljupco Spasovski	former president of the Steering Board
Nino Petkovski	former Evaluator / Trainer

In addition to the above mentioned persons we also interviewed school teachers, directors, school pedagogues and school psychologists (in total 23) as well as students / pupils (in total 12) of the following schools: Nikola Karev Secondary School and Georgi Dimitrov Secondary School (Skopje), Slavco Stojmenski Secondary School, Vanco Prke Primary School and Astibo Kindergarten (Shtip) as well as the Bashkimi Primary School (Gostivar).

Annex 7: Field Mission Schedule

Integration of Environmental Education into the Macedonian Education System

Agenda for the field visit (19-23 November 2012)

19.11.2012 (Monday)

09.00-09:45	Meeting of the evaluators	(Hotel City Park)
10.00-10.45	Stanislava Dodeva, Kristina Kolozova	SDC office
11.00-13.00	OXO (entire team)	OXO office
13.00-14.00	Lunch	accompanied with OXO staff
14.15-15.15	Ljupco Spasovski	OXO office; former president of the Steering Board
15.30-16.30	Ajshe Selmani	BDE, St. Rugjer Boskovic bb
17.00	Visit to Telma TV	filming of the 5+ TV show

20.11.2012 (Tuesday)

08.30-10.00	Zorica Velkovska	Coordinator of the Program, MoES
10.00-10.30	Elena Ivanovska	Head of the Sector for Primary and Secondary Education, MoES
10.35-11.40	Nadica Nikolovska	Director of the State Education Inspectorate
12.00-14.00	Visit to the Secondary school Georgi Dimitrov	Skopje – eco label
12.00-13.00	Interview with the director	Ana + Harald

13.00-14.00	Focus group with school staff (teachers, psychologist, pedagogue)	1 hour (Ana)
13.00-14.00	Violeta Drakulevska	City of Skopje, member of the Steering Board (meeting to take place in the school) (Harald) – Interpreter needed
14.30-15.15	Lunch	
15.30-16.30	Lena Damovska	Institute of Pedagogy Skopje

21.11.2012 (Wednesday) – Interpreter needed

08.00	Travel to Shtip	1.30 hour drive from Skopje
09.30-9.45	Zoran Aleksov	Mayor of Shtip
09.45-10.30	Vane Manevski, Vlatko Panov	in charge of education / environment in the municipality
10.45-11.45	Interviews with director, support staff (psychologist/pedagogue) and 2 teachers	Kindergarten Astibo – eco label
12.00-13.00	Primary school Vanco Prke	Interviews with director, support staff; Harald+Ana
13.00-14.00	1 focus group with teachers	(teachers from other schools can come as well) Ana
14.00-14.30	Lunch	
14.30-16.00	Secondary School Slavco Stojmenski Interviews with director, support staff	Harald+Ana
15:30-16.30	1 focus group with students	Ana
16.30	Travel to Skopje	

22.11.2012 (Thursday) – Ana / Gostivar

08.00	Travel to Gostivar	1 hour drive from Skopje
09.00-9.15	Mayor of Gostivar	
09.15-10.00	Redzep Hamiti, Maja Anastasieska	Representatives for education / environment from the municipality
10.15-12.00	Visit to Primary school Bashkimi	Interviews with the school director, support staff, 2 teachers
13.30-14.30	Lunch / Travel to Skopje	

22.11.2012 (Thursday) – Harald / Skopje

08.30-9.15	Nino Petkovski	Professor Faculty for Education Management, former program evaluator
09.30-10.15	Stevo Temelkovski	MEPP, MRTV building, St. Goce Delcev no.8 – Interpreter needed
10.30-11.30	Branko Aleksovski	CVE, MRTV building 2 nd floor, St. Goce Delcev no.8 – Interpreter needed
11.45-12.45	Arijan Toska	MDC-Ti-NET project, St. Leninova 11
13.00-14.00	Zlatko Samardziev	GEF, Bvd. Vodnjanska 15/6
14.30-15.30	Vesna Arsovska-Dinkovska	ZELS, Member of the Steering Board of the Program
16.40-18.00	Kornelija Radovanovic, Senior Project Manager; Katarina Georgievska - Country Office Director	REC, St. Ilindenska 118
19:00-21.00	Zorica Velkovska	Coordinator of the Program, MoES

23.11.2012 (Friday)

08.30-10.30	P. Taleski, A. Mladenovska-Kostik	OXO, Topic: organisational assessment (Harald and Ana)
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11.00-12.00	Focus groups with secondary school students (young rapporteurs)	Ana
11.00-12.00	Preparation debriefing	Harald
13.00-14.00	Anita Kodzoman, Programme Officer	UNDP, 8-ma Udarna brigada -2
14.00-16.00	Stanislava Dodeva, Kristina Kolozova, Katharina Stocker	SDC Debriefing, Ana+Harald

Travel: Harald Meier (Zurich-Ljubljana-Skopje, 18 November 2012 at 25:45; return flight: 24 November 2012 at 04:45).

Annex 8: Literature (selected)

Integration of Environmental Education in Macedonian Education System 2010-2013: Project Document (including Annexes)

Integration of Environmental Education in Macedonian Education System 2010-2013: Interim Reports 1-5 (including Annexes)

Integration of Environmental Education in Macedonian Education System: Phase 5 (Scale-up phase): Credit Proposal, Swiss Agency for Development and Cooperation, Bern, December 2012

Cooperation Strategy Macedonia, 2009-2012, Swiss Agency for Development and Cooperation, Bern, 2009

Review Mission Report: Analysis and recommendations for scaling up the OXO programme “We don’t have a spare planet”, R. Gollob / W. Weidlinger, PHZ, Zürich, 2012

Integration of Environmental Education in Macedonia: Backstopping Mission Report, W. Weidlinger / R. Gollob, PHZ, Zürich, 2012

The former Yugoslav Republic of Macedonia, 2012 Progress Report, European Commission, {COM(2012) 600 final}, Brussels, 2012

The state of environmental education addressing fifth to ninth grade students in Macedonia, Thesis submitted to the Central European University, J. Spiroska, Budapest, 2010

National Report of the Republic of Macedonia on Education for Sustainable Development, Macedonian Civic Education Centre, Skopje, 2011

National Strategy for the Development of Education in the Republic of Macedonia 2005-2015, Skopje, Ministry of Education and Science, 2004

Wbsites (selected):

<http://www.oxo.org.mk>

<http://www.nrp.ork.mk>

<http://www.facebook.com/pages/5-Trcaj-Petko-JUHI-JUHI-JEEEEEEJ/119811261363157>

<http://www.swiss-cooperation.admin.ch/macedonia/>

[htto://www.fee-international.org/en](http://www.fee-international.org/en)