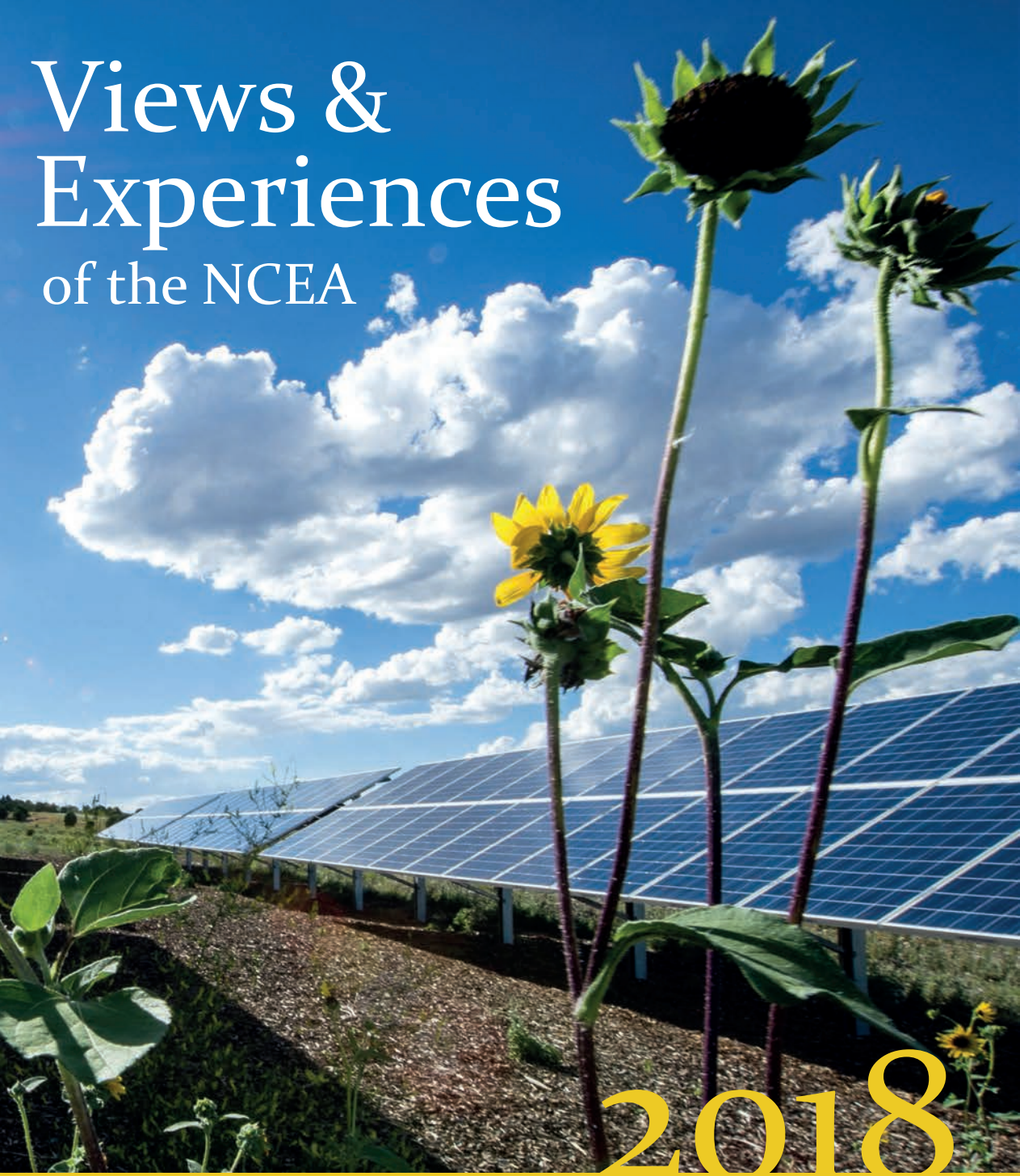
Views & Experiences of the NCEA



2018

Energy Transition · Independent Quality Control · The Future of Environmental Assessment · Port Development · Landscape Approach · ESIA Mapping

Mission statement

The Netherlands Commission for Environmental Assessment is an independent advisory body of experts. It provides advisory services and capacity development to national and international governments on the quality of environmental assessment. The NCEA's extensive knowledge of environmental assessment is available to everyone.

The three most important qualities of the NCEA are:
- independence
- expertise
- transparency

The NCEA's status as an independent foundation, ensures that its assessments are achieved independently from government accountability and political considerations.

Views and Experiences 2018

from the Netherlands Commission for Environmental Assessment

Contents

Foreword

Dear reader,

It is with great pleasure that I present the ninth publication of our Views & Experiences, a tradition which started in 1994. We now have more then twenty-five years of experience in the application of environmental and social impact assessment (ESIA) and strategic environmental assessment (SEA) in the Netherlands and abroad, in particular in low and middle-income countries. As a public knowledge institute, we consider it our duty to share the experience we gain in our day to day practice.

In this edition we focus on independent quality control, port development, energy planning, ESIA system analysis and the role of environmental assessment in landscaping. This publication is particulary special to me for the interview with Professor Rudy Rabbinge who, after nine years of chairing our international programmes, retired this year. He shares with us the lessons he has learnt during his chairmanship. We are all very grateful to Professor Rabbinge for his contribution to our work.

I wish you pleasant reading.

Mr Kees Linse
Chair
Netherlands Commission for Environmental Assessment

Prof. dr. Rudy Rabbinge, outgoing vice-chair of the NCEA

‘Independent evaluation is important in a time where pronouncements are often judged more in terms of their political correctness than of their content and rationale.’

By Joost van Kasteren

Over the years, environmental assessment has developed into a powerful instrument for critically examining various aspects of sustainable development – not only ecological but also social and economic. "But at the same time this critical stance makes you vulnerable", says Rudy Rabbinge, the NCEA's outgoing vice-chair, "because nowadays pronouncements are often judged more in terms of their political correctness than of their content and rationale". This phenomenon means there continues to be an important role for environmental assessment and for its evaluation by the NCEA's independent experts.

What were your experiences during your nine years' involvement with the NCEA?

"The growing authority of the NCEA, not only with project proposers but also with the Directorate-General for International Cooperation at the Dutch Ministry of Foreign Affairs. We are widely accepted. This was far from matter-of-course in 2011, during the consultations about prolonging our cooperation with the Ministry. Then, the environment was not a priority. By clearly demonstrating that environmental assessment entails more than the environment and that it is uniquely suited to contribute to sustainable development, we succeeded not only in having our subsidy agreement renewed but also in expanding to include a programme of sustainability advice. This programme assists both the Directorate-General and Dutch embassies to mainstream sustainable development. Last year, during the most recent discussions about our cooperation with the ministry, the budget was increased again. This is primarily an acknowledgement of the significance of the expertise we at the

Rudy Rabbinge, emeritus professor of sustainable development and food security, has been vice-chair of the NCEA since 2009. In addition to his work he has always fulfilled many administrative and advisory roles in the public and private sectors in the Netherlands and abroad.

The **NCEA** was established by decree in 1987 as an independent advisory body on environmental assessment for The Netherlands. In 1993 the NCEA also started to operate internationally. The core of the NCEA's international work is to support environment and sectoral ministries, environmental assessment professionals and non-governmental organisations to improve their environmental and social assessment practice. It advises on the quality of the process and content of these assessments, at both project level (ESIA) and strategic level (SEA).

NCEA can offer: for each project we can draw on a pool of international experts supported by well-informed and motivated technical staff."

And in developing countries specifically? I can imagine that Western experts who drop by and give an opinion are viewed with some suspicion.

"Our approach is not that of an expert who points out all the things that are wrong. We start out from the perspective of the country in question. In Senegal, for example, at the request of the Senegalese government we are engaged in a possible strategic environmental assessment (SEA) of the question of how to deal with their extensive oil and gas reserves. As a signatory to the Paris Climate Agreement, Senegal is committed to achieving the aim of reducing emissions of greenhouse gases. We're not going to say, 'leave the oil and gas reserves in the ground and go for solar and wind power'. But we are advising the government on how environmental assessment can be deployed to arrive at a well-considered decision about which of the available courses of action to opt for. For example, one such option could be to optimise the use of the fossil fuel reserves so as to transition to a more sustainable energy supply. The criterion remains sustainable development, but in this case, as seen through Senegalese eyes".

Can the NCEA's work be seen as a form of conflict resolution? Authoritative experts defusing a conflict's political charge?

"Environmental assessment itself is already a form of conflict resolution. For example, we're engaged in discussions with the governments

of Kenya and Ethiopia in order to advise on an SEA for the construction of a series of dams in the Omo river. These dams are important to enable Ethiopia to meet the growing demand for electricity at home and for export to neighbouring countries. The Omo river is also an umbilical cord for Lake Turkana, a large

desert lake in the arid north of Kenya that local Kenyans are dependent on. The possible consequences of the dams on the water supply are causing concern, especially because of the long drought in this area. These concerns can be analysed in the SEA. As good participation is one of the three mainstays of environmental assessment, it creates support together with transparency and quality of information, which results in fewer conflicts. The NCEA can indeed play a role in this. Our independence, the fact that we do not have a stake in the projects we advise on, helps ensure that our recommendations are accepted by all parties."

Have stakeholders ever rejected the NCEA's judgement?

"No, I can't recall our recommendations ever being rejected by stakeholders. They're not always welcomed, but that's a different story."

Environmental assessment is most effective if governance is good, but in many countries, this is often not the case. So, is it worth doing?

"Correct: the presence of good governance is important, but in previous years I've also seen that people in countries where governance is less good have called the government to account with the help of environmental assessment. In almost all countries environmental assessment is legally regulated: the legislation specifically mentions certain obligations, such as providing information about an initiative's environmental and social impacts, stakeholder participation and the publication of decisions. People can insist on these obligations being met – indeed, they are increasingly doing so. And so, governments have to do something about this, which is gratifying."

How would you describe the NCEA?

"I think the NCEA is best characterised with the words that were used when I was recently awareded the Rachel Carson prize by the VVM, the Dutch network of environmental professionals. According to the jury I am averse to dogmas, I am transparent and don't shy away from debate. I think these qualities apply to the NCEA too. They don't always make you popular, but you shouldn't want to be. At the same time, this critical stance makes you vulnerable. When the big questions of our time – food security, energy supply, poverty reduction – are involved it sometimes seems that arguments no longer matter. Wishful thinking has taken the place of critical analysis, and pronouncements are judged more on their political correctness than on their content and soundness. That poses the risk of being impopular for an organisation like the NCEA that stresses soundly-based arguments."

So does the NCEA have a future?

"Undoubtedly. Precisely because there is a great need for the judgement of independent experts who are not swayed by the political issues of the day."

And what of the future of environmental assessment itself in developing countries?

"In the context of the UN we have committed to achieving a number of sustainability targets by 2030. Environmental assessment can play an important role in developing countries for testing the initiatives of companies and organisations and government policy against these Sustainable Development Goals. Moreover, developing countries profit from a 'tortoise and hare' phenomenon, as technical advances enable them to leapfrog certain stages. A prime example is mobile

telephony, which does away with the need for a fixed network. But developing countries can also profit from technological advances in agriculture through which increased productivity is accompanied by a lower impact on environment and biodiversity. Countries can also be seen leapfrogging towards a sustainable future in industry, mining and energy supply. A tool such as environmental assessment that is required to always highlight the most ecologically far-reaching alternative is unbelievably important for channelling developments in the right direction."

At some point in time will these countries be able to do this themselves?

"That is ultimately the intention – after all, capacity development is one of our aims – but I think that our independent advice in particular, will still be sought for a while. Demand for an impartial assessment of the environmental and social impacts of large, complex and politically sensitive projects remains great for the time being, particularly in Africa, but also in South-East Asia. Think of the transboundary projects, for example. The NCEA has built up so much prestige in the last 25 years that for the foreseeable future governments of developing countries will be happy to continue to call on us."

Independent quality control

How does it work in the Netherlands?

By Gijs Hoevenaars

The Netherlands now has several decades of experience with a system of independent quality control of Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) reports. The recent revision of the EC - EIA Directive pays more attention to the quality of EIA reports.
This article reflects on how the Dutch system works, the role or the NCEA and in which ways the revised EIA Directive will affect the system of quality control in the Netherlands.

Established by law

Quality control in the Dutch EIA and SEA system is ensured by an independent commission of experts: the Netherlands Commission of Environmental Assessment (NCEA). The NCEA is an independent body established by the Dutch Environmental Management Act (EMA), which briefly stipulates its composition and working methods. The Act provides for a private institution that is not part of government to have a vital role in quality control of EIAs and SEAs in the Netherlands. The NCEA used to be subsidised by central government on the basis of the number of projects it reviewed each year, but since 2014 the Commission has been paid by the competent authority requesting the review, as the Dutch government has decided that the cost of review should be borne by the entity benefiting from the review. In 2018, the cost per review varies between €6750–€36,000, depending on the competent authority (municipality, provincial authority or central government), complexity of EIA/SEA procedure and the type and frequency of our advice.

Under the current EMA it is mandatory for a competent authority to request all SEAs and EIAs for certain complex projects to be reviewed by the NCEA. In effect, this means the NCEA has the monopoly for independent quality review of these SEAs and EIAs. It may also be requested to review scoping documents and EIAs for other projects, but such requests are voluntary. In 2017 the NCEA reviewed about 140 projects, 50 of which had been requested voluntarily.
The NCEA checks the completeness and correctness of the information in EIAs and SEAs. In 2017 for example, 70% of the assessments reviewed proved to lack essential information.
In the case of a scoping document, it will specify which information is needed for the EIA or SEA concerned. The main criterion for 'needed' is that all information to enable stakeholders to take the interests of the environment fully into consideration in the decision making process should be available in the EIA or SEA.

"From the interviews it appears that NCEA's status and authority, and the extent to which it is seen as an expert, remain great. The added value of the advisory report for the quality of the decision making is generally estimated as high. Furthermore, there is broad agreement that NCEA's advisory report contributes to predictable development of the subsequent decision making. This is largely because this advisory report is seen as a kitemark assuring that an environmental assessment report can withstand scrutiny (including by the administrative court)."
External evaluation of the Environmental Management (tariffs for NCEA) Act 2018 by Berenschot.

Independent

It is important to specify what is meant by 'independent'. It means that NCEA experts have no involvement or interest in the project for which they are reviewing an SEA, EIA or scoping document, in terms of their employer, colleagues, private (e.g. partner), city of residence or additional jobs. It is the responsibility of both the NCEA and its individual experts to verify this before starting the review. Furthermore, the competent authority is given the opportunity to provide arguments against involving a given expert on the grounds that the expert is in some way involved in the project. The final decision lies with the NCEA itself.

The NCEA's independent status is emphasised by the fact that the NCEA never expresses an opinion on the desirability of a project. It is only concerned with the information that is needed for the decision making with regard to a project.

Closely related to independence is the notion of transparency. By working in public, the NCEA avoids appearing to have conflicting interests. The NCEA only works on the basis of public information that is accessible to all. In its review reports it explicitly mentions the specific documents consulted. Moreover, our website discloses which projects are currently undergoing review. Last but not least, all review reports are published on the website, together with the names of the experts who were the reviewers. It is therefore quite common for NCEA reports to be quoted in court proceedings.

For some years now the NCEA has published a press release to accompany the publication of a review report. By doing so, it brings its report to the attention of local and national media.

Working groups

In effect, the NCEA is a large group of about 350 experts that is supported by a secretariat. When a review is requested the chair of the NCEA appoints a vice-chair and technical secretary, who will select the experts (the number varies between two and ten) needed to carry out the review. Together they form a working group.

The technical secretary then draws up a timetable to ensure the review is completed within the statutory time limit of six weeks. If the NCEA is voluntarily requested by the competent authority to take the views of the public into account, the time-frame is extended by three weeks.

The experts read the documents and send their preliminary remarks and questions to the technical secretary. These questions are passed on to the competent authority to facilitate the preparation of a site visit. During this visit the competent authority is expected to answer the questions posed by the NCEA, show the NCEA where the project will take place and point out challenges or opportunities relating to the environment. At the request of the competent authority, the developer and affected parties may take part in the site visit. In some cases, the technical secretary will visit a public hearing to receive more local information about the project and its surroundings.

After the site visit the working group withdraws for discussion. On the basis of this discussion the technical secretary prepares a first draft of the report, which is then discussed at the next meeting, after which a second draft is prepared. Meanwhile, the draft is co-read within the secretariat, to check its coherence with earlier reports on comparable projects and ensure that the language is non-technical.
The final draft is sent to the competent authority, which then usually accepts the invitation to attend a meeting at the NCEA for further explanation of the report. After this meeting the report is finalised and the press release is drawn up. Both will be published a few days after the meeting.

How does the revised EIA Directive affect quality control?

In 2014 Directive 2014/52/EU amending EIA Directive 2011/92/EU was adopted. The revision of the Directive was required to be transposed into national legislation by 16 May 2017. The revision had several objectives: to strengthen the quality of the EIA, to align that procedure with the principles of smart regulation, and to enhance the coherence and synergies with other EU legislation and policies as well as with strategies and policies developed by Member States in areas of national competence. For the purpose of this article, I will focus on the amendments related to the first objective, how they have been implemented in Dutch legislation and ways in which this influences quality control in the Netherlands.

Article 5(3)a of the Revised Directive states that the developer shall ensure that EIA reports are prepared by 'competent experts'. For the transposition of this provision the Netherlands considered introducing a system for accreditation of these experts. However, this was not adopted, for various reasons – one being that it would make the EIA procedure too costly. Moreover, the legislator noted that in Dutch practice EIA reports are usually prepared by consultancy firms. As these consultants can be assumed to be sufficiently knowledgeable, the legislator decided that it was unnecessary to insert a specific provision relating to the competence of experts.

Article 5(3)b obliges the competent authority to ensure ´that it has, or has access as necessary to, sufficient expertise´ to examine EIA reports. As this obligation is already covered in Dutch administrative law, the Dutch legislator referred to the appropriate codified principle (in article 3:2 of the General Act on Administrative Law) that obliges a competent authority to thoughtfully prepare its decisions. Nevertheless, the revision led to a slight change in Dutch law. The EMA now explicitly mentions the possibility of requesting review by the NCEA as a way of obtaining sufficient expertise. That option had always been available, but now it is explicitly stated. In practice, however, the costs of review by the NCEA seem to be a burden, especially for smaller municipalities. It is therefore questionable whether access to sufficient expertise is guaranteed in practice.

Last but not least, article 9bis of the revised Directive introduced an article that is somewhat related to quality control. The article states that where the competent authority is also the developer, ´Member States shall at least implement, within their organisation of administrative competences, an appropriate separation between conflicting functions when performing the duties arising from this Directive´. In the Netherlands, this provision has been transposed almost verba-

tim into article 7.28a of the EMA. To facilitate EIA practice, guidelines for appropriate separation for EIA have been prepared and are awaiting parliamentary approval. The guidelines contain suggestions on how to organise such appropriate separation. The separation should be at least on a personal level within the administration but might need to be extended to heads of departments. Furthermore, the guidelines suggest separation at government level too, e.g. two different local authority councillors or ministers. In any case, it is expected that the requirement for separation will generate much case law. To avoid any appearance of a conflict of interests within an administration, independent quality control by the NCEA may be requested.

Summing up: the revised EIA Directive will not have a significant influence on the way in which quality control is dealt with in the Netherlands. The amendments in Dutch law do strengthen the position of the NCEA somewhat in EIA practice. However, the formulation of the articles on quality control are rather vague and leave room for interpretation. It will be up to the judges of the European Court of Justice to specify how these articles should be interpreted.

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Infographic

The role of the NCEA in the Netherlands

What **is** the Commission?

Independent

The Commission has no interest in the project itself. The authority decides if a project is carried out or not.

Established by law

The Commission is a public body, established by law. It is not part of government for reasons of independency.

Knowledgeable and up-to-date

For each project, the Commission selects the relevant experts from a large database.

Transparent

All advisory reports by the Commission are available on its website.

The good, the bad, the ugly

The quality of ESIA practice for port development in emerging countries

By Rob Verheem and Johan Lembrechts

Why this study?

In 2016 the NCEA carried out a study commissioned by the Dutch Ministry of Foreign Affairs to identify possible measures for enhancing the quality of ESIA for port development in emerging and developing countries. The Ministry had started a 'multi-stakeholder dialogue on land governance' (hereafter 'the dialogue') to determine how best to help improve land governance in emerging and developing countries. It was initiated since the land rights of indigenous peoples are often violated during the implementation of large-scale agricultural, infrastructural or residential projects.

The dialogue aims to identify lessons learnt and best practices supporting pro-poor land governance. Its primary focus is on land governance in the context of infrastructure development, starting with a pilot on port infrastructure, as projects of this type may affect large areas and thus large numbers of people. The NCEA was asked to contribute to the goals of the dialogue by scrutinising past environmental and social impact assessments (ESIAs) for harbours and ports. The study was originally to focus on land governance, but to take full advantage of the initiative it was decided to look at wider issues too.

Our approach

Expert working group

The NCEA is a secretariat operating through ad hoc expert working groups tailored to the advice or support requested. For this port study we assembled a group of six experts covering fields of expertise such as hydraulics, ecology, demography, port planning, socio-cultural and gender issues, and natural resource management.

Suitable port ESIAs

We then identified suitable port ESIAs to be studied. We did so using criteria such as 'should be recent, i.e. 2008 or later', 'focus on new onshore developments as these have the biggest land use consequences', 'spread of ESIAs over multiple countries worldwide' and 'make reference to good practice standards for ESIA such as IFC, etc.'. This led to eleven ESIAs being selected, most of which dealt with coastal ports to be extended or constructed for the transhipment of containers or bulk materials and which were to be achieved with the financial and technical support of international development banks.

Benchmark

Next, the expert group developed a benchmark for what they regarded as 'good practice' port development ESIA. For this, various guidelines were analysed,

ranging from dedicated country guidelines for port development to the general guidelines of international development banks. Our aim was to find a benchmark that would succinctly combine the important standards in all these guidelines. We selected the Equator Principles as the basis for the benchmark, but augmented it with a number of criteria listed in the IFC's EHS guidelines on ports, harbours and terminals and with aspects derived from the OECD guidelines on fair competition, taxation and corruption.

Analysis

The benchmark was then used to analyse the ESIAs: first, to identify the issues they had covered, then the issues they had ignored and finally to arrive at recommendations that would further enhance port ESIAs. Where possible we indicated ESIAs that could be regarded as exemplary in their treatment of specific issues, to serve as inspiration for the quality of future ESIAs. We deliberately refrained from mentioning the bad examples as the purpose of this study was to improve and inspire, not to name and shame.

The good, the bad and the ugly

We found that most of the ESIAs did indeed include many issues and process elements one would expect in a good practice ESIA. Among these were employment and economic opportunities, loss of income, effects of dredging, impacts on ecosystems and encroachment on communities. Surprisingly, however, many important environmental and social issues were not assessed: indeed, for some of these, such as climate change, impact on workers and the financial justification of the port investment, none of the ESIAs could be regarded as exemplary. This is particularly surprising as all eleven ESIAs had been developed under one or more of the safeguarding systems of the financing institutions.

More specifically, the following issues and process elements were lacking in most ESIAs:

- Land governance

  Most of the ESIAs failed to describe seasonal access and user rights, such as grazing, hunting, fisheries, and the collection of water, firewood and building materials. The variety in tenure rights, both formalised and customary, was sometimes described in general terms. Indigenous rights were not mentioned and traditional rights were described infrequently.

- Consultation and grievance mechanism

  Most of the ESIAs did not describe either the decision-making and stakeholder engagement process followed while preparing the ESIA/decision or the participatory process to be followed during realisation and exploitation. There were very few mentions of grievance mechanisms, rule of law (or its absence) or of possible discord between national legislation and traditional laws.

- Economic justification for the port development (the 'business case' or 'viability')

  Even though the justification itself does not necessarily have to be in the ESIA, reference must be made to it to enable a conclusion to be drawn on whether the economic opportunities outweigh the often significant environmental and social consequences.

- Alternatives for site selection, layout of the port and mitigating measures

  If a site has already been decided on at strategic level, the decision and its justification must be properly referred to in the ESIA at project level.

- Relevant baseline data

  Most of the ESIAs exhaustively listed the available data but paid scant attention to their relevance for the assessment of impacts, to their interrelations and to baseline dynamics. Gaps in the data and risks related to these gaps were often overlooked.

- Cumulative impacts

  None of the ESIAs studied adequately described and assessed the cumulative impacts: for example, those resulting from developments directly associated with the port development or from other developments in the region. In many cases, this absence is attributable to lack of knowledge of anticipated developments and to limited government capacity and (strategic) planning schemes.

- Indirect impacts

  Most of the ESIAs assessed indirect impacts inadequately, even though these may be large. Examples include the effects of the management of waste (or wastewater) on drinking water quality, of pollution on wildlife, of displacement of people and of the influx of workers.

- An accountable Environmental and Social Management Plan

  Such a plan was missing in a significant proportion of the ESIAs, with the result that these ESIAs lack information – for example, on the effectiveness of measures, on which measures can be taken versus the measures that will be taken, and on when measures are scheduled.

- Climate change

  Neither the potential effects of climate change nor the need for mitigation or adaptation were dealt with rigorously in the sample of ESIAs. This finding is surprising given that port infrastructure may be sensitive to sea level rise and to changes in the severity and frequency of extreme weather events.

- Sediment dynamics

  Most ESIAs provided insufficient information on changes in sediment dynamics, even though this is a key impact of port development. Changed dynamics may greatly affect coastal erosion or accretion and thus other socio-economic developments. It will also change ecosystems, habitats and the abundance and diversity of species.

- Impacts on workers

  The impacts of the project on workers, such as on their working conditions and housing, were poorly described in all the ESIAs. In general, no risk assessments had been made with regard to occupational health and safety and basic human rights.

- Sustainable use of resources

  Most of the projects claimed resources would be used efficiently but failed to explain how. Most of them referred to standard techniques and equipment. None of them considered concepts such as cradle-to-cradle and the circular economy, or renewable energy sources, the efficient use and re-use of resources and the avoidable effects relating to the influx of employees and their families.

Next steps?

As stated earlier, the list of omissions found in most of the eleven ESIAs for port development is surprising, given that all the ESIAs were prepared under the financial institutions' safeguarding systems. The implication is that the existence of these systems is not enough. What is needed is a solid quality assurance system that ensures the safeguards are upheld.

In as far as the sample of ESIAs studies is representative, our recommendation for ESIAs for port development in emerging and developing countries is that these should pay significantly more attention to the numerous issues indicated above.
Paying more attention to these will directly benefit the port development, as it will lead to better projects: for example, port development may be directly influenced by climate change and sediment dynamics (the need for continuous dredging to keep the port open).
The same is true for the local resistance that may be created by ignoring proper land governance, lack of participation in the design of the port or the lack of a proper grievance mechanism.

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Our towns energy neutral in 2030?

How SEA can tell if this is realistic

A case study from the Netherlands

By Pieter Jongejans and Geert Draaijers

As part of the new Environment and Planning act (expected going into force 2021), every municipality in the Netherlands is required to have an **environmental strategy**. This long-term strategic vision on the entire living environment should address the spatial relations between water, environment, nature, landscape, transport/ infrastructure, cultural heritage, etc. The strategy is the starting point for one or more **spatial environmental plans,** in which the vision is elaborated into more concrete decisions and developments.

Energy transition in the Netherlands

In its Energy Report: Transition to Sustainability, published in 2016, the Dutch government urges provinces and local authorities to address the necessary energy transition in their environmental strategies and environmental plans (see explanation on the right). Strategic environmental assessment (SEA) – in the Netherlands mandatory for environmental strategies and plans - can offer the rationale and substantive support for this. Also it helps in consulting stakeholders and in seeking to secure support for measures.

What the energy transition is intended to achieve

The Paris climate agreement of 2015 intends to limit global temperature rise to less than 2°C. To achieve this, greenhouse gas emissions in 2050 will have to be 80–95% less than they were in 1990. The goal set in the Paris agreement must be achieved by reducing energy consumption and using sustainable sources of energy.

Two interim reduction targets relative to 1990 emission levels have been formulated at European level:

- a 20% reduction, to be achieved before 2020
- a 40% reduction, to be achieved before 2030

The Netherlands has committed to meeting these targets. Some provinces and local authorities have formulated their own energy or emission reduction targets, such as “energy neutral in 2040”. As meeting these targets will also have spatial consequences, regional authorities

have an important responsibility to take energy transition into account in their spatial planning.

The energy transition's spatial impact

Besides its physical environmental impacts, in a densely populated country like the Netherlands, transitioning to a sustainable energy supply particularly impacts on demand for space. For example, space to generate energy (wind, solar, hydro, biogas, biomass, geothermal), space to transport electricity and heat transmission, and space to store energy (heat/cold, CO_2).

Part of the transition is to strive for gas-free towns and districts. This also has spatial implications: for example, infrastructure is required for geothermal energy and for storing heat or cold. Greenhouse gas emissions can also be reduced by modifying land use: for example, by controlling the dewatering of peat areas (dry peat areas emit large amounts of greenhouse gas).

The role of SEA

Achieving the necessary energy transition will require interests to be weighed at national, regional and local levels, and responses for future innovations to be prepared. SEA can support the discussions between public authorities, industry, interest groups and residents by presenting the options for achieving the energy transition, and the spatial and environmental consequences of the possible choices. This may also help in reducing public resistance to plans and projects important for the energy transition.

The information in the SEA report

To optimally support public debate, in the view of the NCEA the SEA report for an environmental strategy / plan should provide insight into:

- energy demand and the various options (strategies) for saving energy and using sustainable sources of energy such as wind, solar, heat/cold, geothermal, as well as their spatial consequences
- the contribution of these energy strategies to local, regional and national greenhouse gas emission reduction targets
- options for combining the energy transition with other ambitions for the area, such as using flood defences for sustainable energy production ("energy dikes") or combined wind and solar farms
- the consequences and risks arising from the various energy strategies: for example, for landscape, biodiversity, safety for local residents, flood avoidance and water quality

Practical experience in the Netherlands

Since energy transition is an important topic and will remain so for the coming years, the NCEA will address this issue prominently in its advisory reports. One of our recent examples is the advice on the SEA for the environmental strategy of Hillegom municipality.

The Hillegom case: Assessing energy neutrality in an SEA for municipal planning

The municipality of Hillegom, which has a population of 20,000 and lies in the flower bulb farming area in the west of the Netherlands, is developing an environmental strategy called "Heerlijk Hillegom" (Glorious Hillegom). It contains aspirations for 2030 and a vision on the direction of developments within the municipal area, for instance:

- sustainable flower bulb farming, by scaling up and using innovative technologies
- realising new attractive residential areas by relocating industrial/business areas
- stimulating recreational services and activities
- improving public health and environmental quality (including nature conservation)

and

- ensuring that Hillegom is 100% "energy neutral" in 2030

100% Energy neutral in 2030

The Paris climate agreement has stimulated increasing numbers of municipalities in the Netherlands to aspire to become "energy neutral", that is, to achieve equilibrium between their energy consumption and energy production. The consequences of Hillegom's ambition to achieve this were analysed as part of a regional study commissioned by a consortium of 14 municipalities. For this purpose, the entire energy demand for the region was estimated, and the opportunities for saving energy and for sustainable energy production were reviewed. Demand for energy in Hillegom largely depends on the built environment and industry. The study estimated that an overall energy saving of 30% relative to energy use in 2014 should be possible by 2050, because any further sustainable energy production within Hillegom proved to be limited by a range of conditions. Geothermal energy and energy from biomass are virtually impossible with-

© Posad spatial strategies. Holland-Rijnland study sustainable energy.

in Hillegom because of their environmental impact and expected low effectiveness. Wind turbines are possible but will be limited by conditions such as air traffic (Schiphol airport is nearby), nature and landscape conservation, and lack of space. Only a few small turbines in rural areas are likely to be possible. This means that solar energy provides the best possibilities, although limitations to this are also imposed by nature areas, cultural heritage and lack of space. The regional study concluded that given the limitations, Hillegom will be able to meet no more than 40% of the energy demand by exploiting sustainable energy sources.

What did the SEA address?

The SEA sketched the outline of the risks and opportunities caused by the strategic "direction" laid down in the draft environmental strategy for seven subareas and two themes. The SEA showed that on the one hand, there are several options for improving physical environmental conditions, such as improving environmental quality in urban areas by relocating industries. On the other hand, it

became clear that realising some of the goals will have significant social, environmental or economic negative impacts, such as heavier traffic or changes in the landscape.
The SEA conveys the impression that not all ambitions from the environmental strategy are attainable. There will be conflicts of interest, which will provide fundamental dilemmas for decision making. For example, the aspiration to be energy neutral in 2030 is unrealistic for Hillegom under the current conditions. If more rigorous measures need to be taken, this might possibly have an effect on other ambitions.

Independent review of the SEA

The NCEA noted appreciatively that the SEA had prominently addressed the energy transition. However, we also concluded that the information provided was inadequate. Even though the SEA report touched on several impacts and conflicting ambitions, it did not give the crucial information needed to be able to make the fundamental choices. For example, where the report mentioned that "rigorous measures might have an effect on other ambitions", it did not identify what those effects might be. And exactly this information is needed to equip the local government with a basis for prioritising ambitions. For example energy neutrality in 2030 versus negative effects on nature and landscape.
In our advisory report we therefore recommended a more thorough analysis of the important qualities of the municipality (for example cultural history, landscape, tourism) as well as of the bottlenecks caused by conflicting ambitions. With that, the environmental impacts of the 'strategic direction' and the consequences for each of the ambitions can be better assessed.

In the Netherlands, an independent **review** of an SEA by the NCEA is **mandatory**.
The NCEA evaluates whether the information in the SEA is complete and reliable, to ensure that the interests of the physical environment can be taken into account in the decision making.

Good practice SEA?

When we look at the four key energy topics to be addressed in an SEA for spatial planning (p. 26), we note that this SEA report:

- did indeed provide insight in the energy demand and the various strategies for saving energy and using sustainable sources of energy.
- did provide (indirectly) insight in the contribution of these energy strategies to greenhouse gas emission reduction targets. The reduction targets are not mentioned in the report, however are incorporated in Hillegom's ambition to be energy neutral in 2030 and climate neutral in 2050.
- did mention - albeit superficially - options for combining the energy transition with other ambitions for the area; For three subareas possible combination solutions are given, for example a solar field -flower bulb farming 'rotation system'; energy neutral housing projects and combining factories with solar panels.
- did mention - albeit superficially - the consequences and risks arising from the various energy strategies. As mentioned in NCEA's review, this topic could and should have been addressed more profoundly, for it to be a significant added value in the decision-making process.

On a more general note, as one of the first SEAs carried out for an environmental strategy, it was a good test case to find out the importance and points of attention of an SEA in a process like this. For the NCEA, one of the most important criteria will always be whether an SEA process and report support decision making. As far as this SEA report is concerned, we could conclude that its role was predominantly indicating and agenda setting, rather than providing the information necessary for good decision making.

Decision making and further steps

After the NCEA's review, an obstacle map showing more prominently actual or potentially conflicting interests in subareas was drawn up as an addendum to the SEA report, to guide decision making. The revised environmental strategy, which also included a "sustainability programme" as an annex, was subsequently accepted by the municipal council. In response to the conclusion that it is impossible to achieve energy neutrality within Hillegom itself or within the broader region, Hillegom (and other municipalities in the region) have opted to seek other ways of becoming energy neutral, such as investing in energy production outside the region, on land or even at sea.

In the coming months or years the strategy will be elaborated into an environmental plan for Hillegom that will also be subjected to SEA. In this next step the NCEA's recommendations on the SEA for the environmental strategy will be taken into account.

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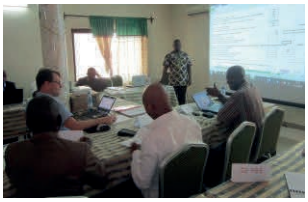
New dynamics in ESIA mapping

By Bobbi Schijf and Sibout Nooteboom

What is ESIA mapping?

ESIA mapping is the NCEA's diagnostic tool for assessing the state of a national ESIA system. Practitioners and stakeholders in a country's ESIA system apply the tool in an interactive workshop in which they discuss ESIA performance with the help of a set of questions. The outcome is a graphical representation of the current ESIA system that informs a shared view about the strong and weak points, and where action is needed. The mapping tool is a work in progress. In nearly a decade of application, ESIA mapping has been regularly updated to reflect lessons learnt.

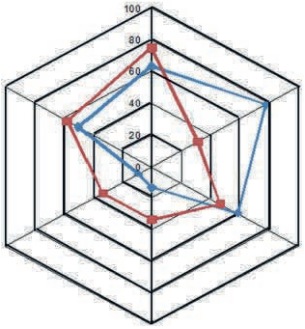
Figure 1 - ESIA mapping
Key elements of the ESIA system and possible questions



The benefits of the mapping

ESIA mapping was developed by the NCEA in 2005, to be applied in its cooperation with different countries. The mapping workshop provides insight into what works well in ESIA, and what are the priorities for improvement. Using a country or provincial ESIA map, the NCEA and its partners can jointly identify cooperation activities. ESIA mapping can also be used to track the development of the ESIA system of a particular jurisdiction. For example, in a number of central African countries, a series of mappings was undertaken in 2005/06 and then again in 2013. Comparison of the results revealed a proportionally significant evolution, in terms both of the legislative framework for ESIA and of practice. For example, there were improvements in the production and approval of the ESIA reports as well as in environmental authorisation.[1]

How does ESIA mapping work?



At the heart of the ESIA map is a questionnaire that addresses key elements of the ESIA system of that jurisdiction. It explores the regulatory requirements for ESIA, but also looks at practice. It considers the ESIA steps taken prior to project approval, but also looks at what happens afterwards: in decision making and during project implementation. The mapping questionnaire is presented in an Excel workbook of interlinked spreadsheets. When completed, the ESIA map consists of statistics, and the stakeholders' expert judgement scores on ESIA performance, all presented in a series of graphs.

[11] Evolution of Environmental Impact Assessment Systems in Central Africa: The role of national professional associations. By D.Bitondo, R. Post, G. van Boven, 2014. ISBN: 9789042139862

ESIA mapping: a work in progress

Working together with a few external facilitators we have now now applied ESIA mapping close to thirty times. Each application brings new lessons learnt about the tool's effectiveness, which help when regularly updating and revising it. In 2014, for example, we added a dashboard to help tailor the mapping to each workshop audience. This made it possible to skip certain sections and concentrate on others. The name was changed from EIA mapping to ESIA mapping, to emphasise the social impacts. And the interface was simplified for ease of use. Most recently, we have adjusted the mapping to bring it in line with our system approach. An ESIA map now incorporates the capacities of key actors in the system. Also included are the system functions that are necessary for good ESIA, such as professional education and exchange. Contextual factors, such as the availability of technical knowledge, the role of the media and corruption are also noted *(see figure 1)*. In the coming years we will continue to apply and improve ESIA mapping. Special attention will be given to incorporating new insights into ESIA effectiveness, aligning ESIA mapping with other diagnostic tools, such as SAIEA's EIA barometer and developing SEA mapping.

"Interpreting the facts together creates mutual understanding."

An interview with Mr Karim Samoura, mapping facilitator

Since 2014, Mr Karim Samoura, teacher-researcher and director of the Master's programme in Environmental Management and Sustainable Development at Université Aube Nouvelle in Burkina Faso, has facilitated ESIA mapping sessions in Benin, Guinee, Mali, Togo, Burkina Faso and Niger. We asked him about his experiences.

What is your role in an ESIA mapping?

"As facilitator, I help ESIA agencies in the preparations for the sessions. This includes identifying stakeholders to invite, collecting data to support the discussion and helping ESIA agencies play their role in the ESIA mapping workshop with confidence. After the session, I summarise the analysis. In a second meeting with the same group, I facilitate a discussion on follow-up."

What kinds of dynamics have you observed in mapping sessions?

"The session offers stakeholders a unique opportunity to analyse their system together. It is often the first time that these people find themselves together in the same room. Civil society actors in particular may never previously have been part of such country-wide discussion. This mix of people leads to a more comprehensive big picture. Interpreting the facts together creates mutual understanding. Professional divides suddenly seem less important, for instance between environmental and sectoral ministries. Grievances from the private sector are taken seriously and taboos evaporate."

What has been the outcome of the mappings?

"Frequently, follow-up emerges, for example under the leadership of academics or associations of professionals. A second striking element is that civil society often starts to participate in ESIA more structurally. In Benin, for example, an ESIA mapping kick-started a community of practice under the leadership of the association of ESIA professionals. This community is still vibrant after three years. In Burkina, mapping coincided with an initiative to reform the ESIA authority, and many mapping participants have become a sounding board for this reform. In Togo, only three months after an ESIA mapping, the minister who had attended signed a decree to break a long stalemate about the division of responsibilities in the ESIA system. Momentum is now building to take this discussion to sub-regional level, to the West African Economic and Monetary Union."

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The role of environmental assessment in the landscape approach

Finding joint solutions

By Gwen van Boven

Since 2017, the NCEA has been in a new type of partnership: the Shared Resources, Joint Solutions (SRJS) programme, which is a strategic partnership of IUCN-NL, WWF-NL and the Dutch Ministry of Foreign Affairs. The NCEA is the knowledge partner on environmental assessment.

The programme

The SRJS programme (2016-2020) focuses on safeguarding ecosystem-based services such as water supply, food security, and climate resilience in 16 low- and lower-middle-income countries across nine regions. IUCN-NL and WWF-NL and their CSO partners (Civil Society Organisations) in the countries concerned are working on planning the land use and sustainably managing selected landscapes that provide the ecosystem services essential for the local communities and broader economic development. On their own, however, CSOs cannot secure ecosystem services. To do so they need to enter into dialogue with government and the private sector. To fulfil their potential, SRJS trains and assists CSOs to play their role in integrated landscape management and facilitates multi-stakeholder cooperation.

Why environmental assessment?

SRJS sees the role of environmental assessment in integrated decision making and implementation of monitoring processes as great potential to the landscape approach. In developing economies, ESIA (Environmental and Social Impact Assessment) is a potentially powerful tool for making fact-based, inclusive, transparent and accountable decisions at project level. The SEA (Strategic Environmental Assessment) instrument, which brings various stakeholders to-

"During the formulation of the SRJS programme, we realised that investments in infrastructure would become key in our landscapes. We would not be able to address that through only sector engagement; we needed to work through the formal system too. That's how we arrived at environmental assessment as an instrument with legal basis".
Bart Geenen, WWF-NL

"The name Shared Resources, Joint Solutions not only covers the aim of the programme but also reflects how we see the NCEA. This is what you do through environmental assessment: find joint solutions."
Lucia Helsloot, WWF-NL

Box 1: Environmental assessment and the landscape approach

The landscape approach and environmental assessment complement each other in several ways:

- Environmental assessment is mandatory for projects (ESIA) in almost all countries around the world, and a growing number of countries are making it mandatory for strategic decisions on plans, policies and programmes (SEA). The landscape approach is usually voluntary.
- Environmental assessment is intrinsically linked to formal decision making: the granting of a project licence requires ESIA, and the adoption of a plan, policy or programme requires SEA. As such, environmental assessment complements the landscape approach by giving decisions a strong legal basis.
- The landscape approach promotes multi-stakeholder engagement in decision making. ESIA and SEA can strengthen this as they are often the only formal processes for which public participation is statutorily required. Also, they often require that documents produced in the process are made public, thereby allowing effective participation.
- An important step in both ESIA and SEA is the development and equitable comparison of alternatives. This allows the best option to be selected for a project or plan, given the economic, environmental and social considerations expressed by the different stakeholders.

gether around strategic-level decisions on plans, policies or programmes, may also be instrumental in implementing the multi-stakeholder approach. This approach is promoted in the SRJS programme and in dialogues facilitated between CSOs, government and private sector parties. Being an impartial tool linked to formal decision making, SEA brings clear added value to the landscape approach (see box 1).

Why the NCEA?

According to Cas Besselink, SRJS coordinator at IUCN-NL: "The NCEA's independence and professionalism makes them a credible player to government, non-government and businesses. They have an overall vision of the instrument that others would not have. Their position opens doors, brings other institutions to the table, and as such gives the entire SRJS programme more impact."

The NCEA has achieved this position over 25 years by being an independent adviser on ESIA and SEA for complex projects and plans, working in response to demand and at the request of government authorities. In addition, over the last

15 years the NCEA has also supported the strengthening of environmental assessment systems, working together with government, EA associations and CSOs.
Our role in the SRJS programme entails working closely with international NGOs and their CSO partners, which is new for us. Since our impartial and independent position is key in this partnership, we carefully select the activities to suit our role and at the same time to be an added value for the target groups. In practice this means that the NCEA may:

- facilitate workshops and training on environmental assessment, preferably for multi-stakeholder groups
- coach ESIA / SEA processes requested by the competent authority
- support the strengthening of environmental assessment system functions, such as the regulatory framework, at the request of the competent authority

on condition that we:

- always inform or engage relevant government organisations
- do not facilitate activities with individual actors

"As I mostly work with ESIA at project level, I am impressed by the overview of what SEA entails. It has given me guidelines for a more integrated approach to the development of different sectors, taking into consideration the importance of environmental and socio-economic aspects"
Quote from a workshop participant in Surinam

Some experiences to date

A needs assessment conducted at the start of 2017 revealed that many SRJS partners thought that ESIA and/or SEA could be important tools to work with, but were uncertain whether they had the skills and capacity required to use them. Several indicated that in addition to their own experience with these tools being limited, the overall practice in their countries was not yet well developed, especially with SEA. They wanted to know how to apply ESIA and SEA more effectively to make better decisions in the landscapes they were working in. They also needed to know what role CSOs could play and how they, government and private sector could work together more effectively.

When the NCEA was starting out, it gave introductory SEA workshops in several countries such as Madagascar, The Philippines and Tanzania; more recently, workshops have been given in Guyana, Surinam and Paraguay. In Indonesia, a country with a more established SEA system, workshops have helped participants learn to see how the instrument could be made more effective in practice. In Benin, Burkina Faso and Zambia, initial sessions on ESIA have revealed different needs related to strengthening capacity and to systemic features. These initial sessions were specifically intended to be introductory and exploratory: to bring the different stakeholders around the table to discuss the concepts and potential applicability of environmental assessment in the country in question. What could be next steps for them?

The Philippines

In the Philippines, a group consisting of 40 local and national NGOs, government agencies and researchers joined in the first SRJS workshop to look at the elements of a good practice SEA system for their country. They concluded that the next steps should focus on improving the SEA regulation, raising awareness of its importance for The Philippines and starting learning by actually doing SEA.

An immediate result of the introductory workshop is that government agencies in Zamboanga del Norte province have decided to carry out an SEA for joint land use planning in District 1 of this province. To launch this SEA a joint workshop for government and NGO stakeholders was facilitated by the NCEA. In this conflict-sensitive area of the country, it was inspiring and encouraging to see how these stakeholders collaborated to solve puzzles and start a joint SEA process. SRJS will now assist these actors to carry out the SEA; the NCEA will act as a coach.

Mr. Noy Panorel of PARTS (Philippinian NGO): *'The NCEA's SEA support has a unique place in the Philippines, in the heart of environmental planning and decision making processes over land use, where alternative development options must be designed and decided upon in a participatory way'.*

Madagascar

IUCN-NL is collaborating with several local partners in Madagascar on the sustainable management of the Ampasindava peninsula. Could SEA – an approach not yet widely applied in the country - be a good means of achieving that? The NCEA facilitated an introductory workshop on SEA for the local stakeholders, including government, NGOs, local tourism operators and a mining company.

Cas Besselink: *"Madagascar is a good example of what we envision with SRJS and SEA. Government, CSOs and even the mining corporation joined the table. Discussions started out by being pretty emotional, but everyone hung on and after three days a more objective debate was being held on possible future steps. The first demonstration of the added value of an SEA approach in practice?"*

The SRJS partners in Madagascar and the Environment agency ONE are together exploring the application of SEA for the municipal and regional land use plans to be developed for the Ampasindava peninsula. They are also studying the lessons learnt so far and how these can be translated into a better SEA regulatory set-up in the country.

Paraguay

In **Paraguay**, WWF organised an SRJS workshop on SEA with the Ministry of Public Works, facilitated by the NCEA which was attended by civil servants of the Ministries of National Planning, of Environment, of Forestry and of Trade.

Ms Daphne Willems of WWF-NL was also present: *"The theme was the Hidrovía, or 'water highway': enhancing navigation of the Paraguay river, which flows through the Pantanal, the largest wetland on the planet. It was a fantastic session. Having all these ministries in the same room was in itself special: cooperation between these departments is scarce. The - mostly young - civil servants were hungry for information. They practised enthusiastically with everything related to the Hidrovía: drinking water supply, irrigation, flood risks, water quality, nature values and impacts for people living along the river, including the Guaraní Indians. They developed a plan for participation, they learnt how to set up an integrated team. The Ministry has decided to set up a team to do such analysis structurally. Mission accomplished?"*

The participants also evaluated the workshop positively, which led to this feedback from WWF Paraguay: "I am very satisfied with the great appreciation the participants express for the importance and applicability of SEA in the planning processes of plans, policies and programmes. It would be good to evaluate internalisation of this tool in the near future".

Zambia

Zambia wants to strengthen ESIA and set up a sound SEA system. But how to do this? WWF Zambia and the Zambia Environmental Management Agency jointly requested the NCEA to help diagnose needs and identify ways forward. An exploratory mission examined the legal and technical aspects. And especially how do the actors see their own and other's roles? How could everyone play their roles more effectively? During a second visit to Lusaka, the NCEA continued to work with ZEMA on updating the ESIA regulations. The NCEA and WWF Zambia, ZEMA, CSO and government partners launched a new approach to reviewing ESIAs – one that can be applied even when time is short and no high-tech expertise is available. Multi-stakeholder discussions on how Zambia could work with SEA resulted in a broad consensus of the need to start with SEA. These were exciting weeks, full of variety! WWF Netherlands is now considering which of the resulting recommendations it will finance as part of the SRJS programme.

Bart Geenen: *"Our partners in Zambia have been working on ESIAs for years but have been much more successful since the cooperation with the NCEA started. WWF would typically focus on environmental impacts of the specific project. We are not ESIA specialists and now understand we should also focus on the ESIA system and processes. You do need to be aware of these things if you want to be effective. In Zambia, they are very impressed by the steps that have been taken together with government. The NCEA opens doors."*

The coming years

It is still early days, but after these sessions, the SRJS partners and governments in several countries asked for support to strengthen ESIA and SEA. In Madagascar, The Philippines and Tanzania, the desire to gain practical experience with SEA has stimulated the stakeholders to prepare for SEA to be applied to specific plans: they have requested the SRJS to assist and the NCEA to coach. In Madagascar and Zambia, the SRJS has resulted in government and SRJS partners becoming interested in jointly investigating strengthening the SEA and ESIA regulatory frameworks respectively. Will SRJS partners in other countries also request support in setting up SEA for their landscapes? The NCEA is waiting to see where the demand will arise, but is encouraged by these first initiatives. In a few years' time we'll see whether commitment for ESIA and SEA has grown and has helped to promote sound landscape management.

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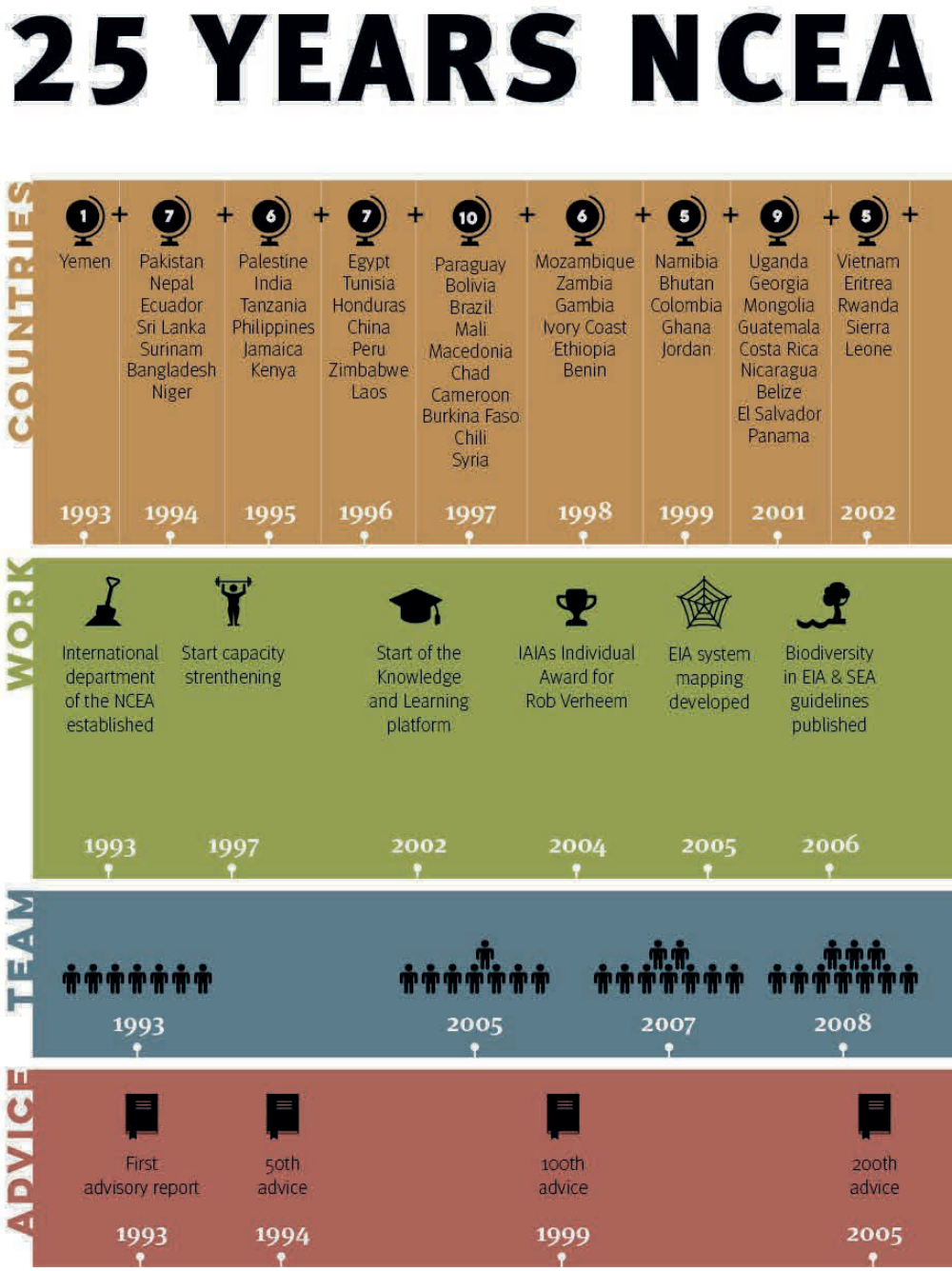
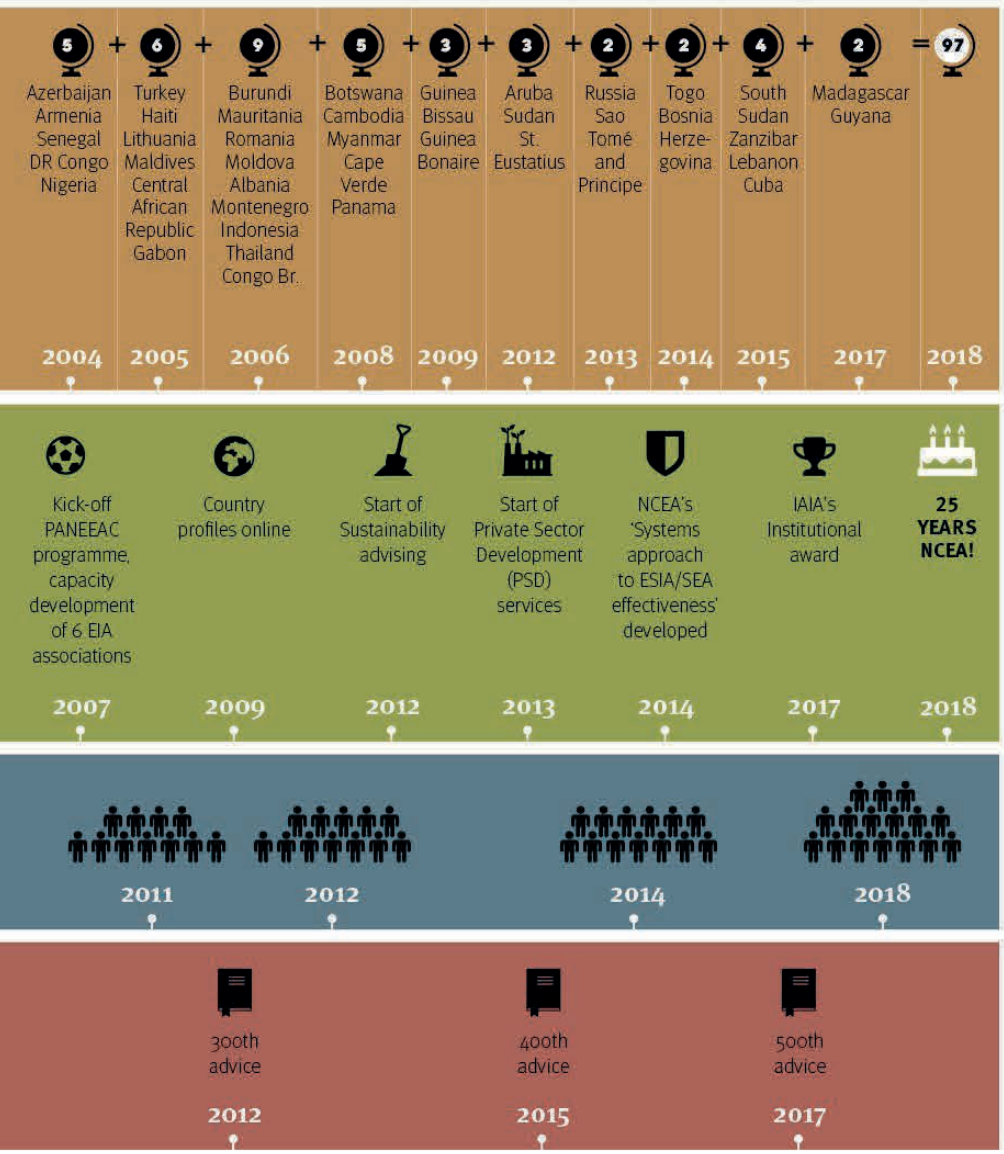
Infographic



Independence - Expertise - Transparency



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