Strategy for Responsible Peatland Management

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Edited by Donal Clarke and Jack Rieley

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Publisher:
International Peat Society
Vapaudenkatu 12
40100 Jyväskylä, Finland
Tel: +358 14 3385 440
Fax: +358 14 3385 410
Email: ips@peatsociety.org
Web: www.peatsociety.org

Edited by:
Donal Clarke, IPS President, Ireland
Jack Rieley, Chair of the IPS Scientific Advisory Board, United Kingdom

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1) Peatlands and their ecological and social values are unique biological, environmental and economic resources.

2) The aims of the **Strategy for Responsible Peatland Management** are to:

- Undertake peatland management according to the principles and within the framework of '*Wise Use of Mires and Peatlands*'[1] by safeguarding their environmental, social and economic functions and respecting their local, regional and global values.
- Ensure that high conservation value peatlands are identified and conserved, 'utilised' peatlands are managed responsibly and drained, degraded or otherwise irreversibly changed peatlands are rehabilitated to restore as many ecological and landscape functions as possible.
- Provide those involved in or responsible for peatland management with strategic objectives and actions for implementation.

3) Peatlands are used and managed for many different purposes. Undrained peatlands are valuable habitats for a wide range of biodiversity and ecosystem services and many are managed as nature reserves. Drained peatlands are used mostly for agriculture and forestry but also for peat extraction to provide energy, growing media and other products. Peatlands are also 'used' or managed indirectly as a result of other landscape activities, for example, urbanization, mining, recreation, reservoir construction, minerals extraction and wind farms.

4) The **Strategy** is directed to everyone responsible for or involved in the management of peatlands, or in the peat supply chain, and is applicable to all types of peatland under every use. It should be applied in every country in which this biological, hydrological and landscape resource is found or in which peat products are processed or used. In order to deliver the **Strategy**, peatlands should be managed responsibly by focussing on the following priority issues.

5) ***Biodiversity*****:** Peatlands are unique natural resources forming distinct ecosystems of importance for biodiversity for the maintenance of genetic, species and habitat levels. The **Strategy** provides guidelines for peatland biodiversity conservation, according to Wise Use principles[1] and recommendations of the International Convention on Biodiversity (CBD) (1992), to be included in landscape planning and management procedures.

After-use plans for peatlands used for peat extraction, forestry, agriculture and other uses should include best practice measures for the restoration of an optimal range of biodiversity and ecosystem services.

6) ***Hydrology and water regulation:*** Peatlands are water catchments. They modify water quality and quantity, act as sinks for some substances, produce others, and influence the temporal pattern of water supply to rivers and lakes. The role of peatlands in water regulation

[1] The 'Guidance Principles' (section 5.4. of Joosten and Clarke 2002, esp. principles 9-14).

depends on maintaining the integrity of their unique hydrology that is independent of but linked to that of adjacent wetlands and the wider landscape. Peatland management activities that influence the level, quantity and quality of water both on site and in the surrounding landscape should avoid unnecessary deterioration in the quality and quantity of ground and surface waters.

After use, peatland water levels and flow regimes should be restored to as close to the natural reference conditions as possible.

7) ***Peatlands and climate change:*** Peatlands are dependent on climate, especially rainfall and temperature, for their formation and maintenance. Under certain conditions peatlands may contribute to climate change processes by the release of carbon dioxide or methane to the atmosphere. Greenhouse gas exchange between the atmosphere and peatlands exhibits much spatial and temporal variation related to differences in ecology, hydrology and management.

Peatland management should avoid increasing and, wherever possible, reduce human-induced greenhouse gas emissions from peatlands and protect their carbon stores.

8) ***Economic activities on peatlands:*** Peatlands provide income opportunities and welfare to local communities and are an important source of food, timber and domestic energy in some countries. Peat is a predominant constituent of growing media, a valuable soil improver and is used in other products.

Intact peatlands provide economic benefits through environmental services such as carbon capture, water regulation and biodiversity maintenance.

Economic use of peatlands should

- Avoid damaging peatlands of high conservation value and prioritize peatlands that have been degraded by human intervention.
- Prevent development of even parts of pristine mires and intact peatlands because this will impact negatively on the ecological character of the rest of the mire or peatland.
- Promote, where possible the use of peat substitutes in growing media and for other uses of peat.

9) ***After-use, rehabilitation and restoration:*** The Wise Use of peatlands for economic purposes requires planned after-use, for example, agriculture, forestry, recreation and wildlife habitat and biodiversity provision (nature conservation). The exact nature of after-use will likely be determined by the landowner in consultation with the relevant planning authority and specified in the planning consent and license to operate. This will probably require some form of restoration or rehabilitation, including rewetting to raise water tables.

Peatland restoration should return degraded peatlands to conditions in which ecosystem functions are as close as possible to natural conditions within the constraints of practicality and at reasonable cost. After-use plans should assess the feasibility of, and include options for, carbon emission reduction and sequestration projects as part of after-use plans.

10) ***Human and institutional capacity and information dissemination:*** It is important to increase the knowledge, skills and understanding of all stakeholders in order to promote the consensus needed to bring about the desired results. Stakeholders (e.g. government administrations, research institutes, the private sector, NGOs, local communities and individuals) need to understand the various issues, respect each other's views and work together. Objectives should include the

- Facilitation of information dissemination and communication with other stakeholders, including local communities, individuals and the public.
- Promotion of better understanding of peatland functions and their responses to climate change and management operations by collating and assessing data on different types of peatland and by sharing information.

11) ***Engagement of local people:*** Promote local community engagement and participation in the decision-making and implementation processes involved in peatland management to help local people understand the key issues and priorities.

Responsible peatland management will provide livelihood opportunities for local people, respect their rights, heritage and traditions, and take into account gender issues.

12) ***Good governance:*** 'Good governance' means responsible management of peatlands in a manner that is open, transparent, accountable, equitable and responsive to people's needs.

Regulatory frameworks and legislation need to be in place at international, regional, national and sub-national levels to ensure responsible management of peatlands and also voluntary mechanisms (for example, funds, certification, payments for ecosystem services) that complement these.

Peatland planning and management should be based on sound scientific knowledge.

Strategy for Responsible Peatland Management

FOREWORD

The process leading to the 'Strategy for Responsible Peatland Management' can be traced back to 1997 when members of the IPS and IMCG met in Surwold, Germany to identify and discuss activities for mutual action. Several potential topics were identified but priority was given to 'Guidelines for Wise Use of Peatlands'. Progress on the guidelines and a range of other issues was reviewed at subsequent meetings of IPS and IMCG and culminated in the publication in 2002 of the book authored by Hans Joosten and Donal Clarke: 'Wise Use of Mires and Peatlands – Background and Principles including a Framework for Decision Making'. This has become the 'standard' against which to measure whether or not peatlands are being managed 'responsibly' in order to provide various goods or services. It provides a framework for implementation of wise use of peatlands within which conflicts between different values and uses of mires and peatlands can be resolved together with a set of 'principles' to guide this process.

In parallel with the joint wise use activities of IPS and IMCG the Ramsar Convention was developing guidelines for the wise use of wetlands, including peatlands. Ramsar embraced the Wise Use approach to the management of wetlands at COP3 in Regina, Canada in 1987 and has refined its definition and implementation since then.

At COP7 in San José, Costa Rica in 1999, Ramsar adopted Recommendation VII.1, which requested cooperation from Contracting Parties and other interested bodies to refine the "*Draft Global Action Plan for the Wise Use and Management of Peatlands*".[2]

Subsequently, as a result of the collaboration between IPS and IMCG, 'Guidelines for Global Action on Peatlands (GGAP) were formulated and accepted by Ramsar COP8 in Valencia, Spain in 2002 in Resolution VIII.17. At the same time the Wise Use Book was presented to Ramsar delegates.

As an Annex to Resolution VIII.17, COP8 requested the Ramsar Secretariat to establish a 'Co-ordinating Committee for Global Action on Peatlands (CC-GAP) to prepare an implementation plan for the GGAP with guidelines, recommendations and priorities. Subsequently Resolution IX.2 of COP9 in Kampala, Uganda in 2005 focused on the future implementation of scientific and technical aspects of this plan and its Annex 2 emphasised the promotion and securing of wise use of peatland ecosystems and their services. It also recognized the work of CC-GAP as a multi-sectoral mechanism to deliver the GGAP implementation plan.

CC-GAP consisted of representatives of a wide range of Ramsar and peatland bodies and was supported administratively by Tobias Salathe, Ramsar Senior Adviser for Europe. The Committee met for the first time in November 2003 and four times between 2004 and 2006. As a result of these meetings a 'Draft Plan for the Implementation of Global Action on Peatlands' was prepared and circulated for consultation.

[2] See Appendix A1.3 for more detailed chronological information.

Amongst the various issues highlighted in this draft plan was that dealing with implementation of wise use. The Global Peatland Initiative (GPI), formed in 2001 to promote government, private sector partnerships for the promotion of wise use of peatlands, and the CC-GAP contributed to a dialogue between the peat industry, scientists and NGOs on how to implement peatland wise use. Over 100 projects worldwide on rehabilitation of peatlands, certification of peat products, and the development of a classification system for raw materials have furthered wise use of peatlands.

The CC-GAP did not have an enforcing function to enable it to identify specific actions or mobilize stakeholders into action, because it could not prescribe who needed to do what. Thus a meeting in July 2006 concluded that the GGAP implementation plan should provide a general framework only for international, regional and local groups to identify, develop and launch their own actions. Further progress on key issues was delegated to a small Executive Team and the CC-GAP has not met since then.

In the meantime, the European Peat and Growing Media Association (EPAGMA) had asked IPS to prepare a proposal for the certification of peat based products. This process commenced in March 2008 and initial proposals prepared by the consultancy company Indufor were reviewed at meetings held in Tullmore in June 2008. Members of EPAGMA and industry members of IPS felt this proposal was too complex and costly and instead of proceeding with the whole certification concept decided instead to support the formulation of a 'global peatland strategy' as a first step.

In the spirit of the GGAP Draft Implementation Plan, and realizing that there was a pressing need for guidance on practical wise use directed at peatland owners and managers and those involved in extracting peat or timber, growing or gathering food or distributing peat or peat products, the IPS took the initiative to encourage peatland stakeholders to participate in the formulation of the 'Strategy for Responsible management of Peatlands', so they can be confident their activities are carried out in the most sustainable and environmentally responsible way. The strategy is also of wider application to certification, conservation, restoration and after-use. All of the uses of peatlands and peat require their own specific guidelines for practical implementation, a task which is being undertaken now that the Strategy has been adopted.

The Strategy is a global document and provides an overall context within which to deal with specific local, national or regional issues.

1. INTRODUCTION

The **Strategy for Responsible Management of Peatlands (SRPM)** applies commonly agreed principles for the *'Wise Use of Peatlands'*[3] to management of all peatlands and provides objectives and actions for implementation. The SRPM is directed to everyone responsible for or involved in the management of peatlands, or in the peat supply chain, and is applicable to all types of peatland under every use. It should be applied in every country in which this biological, hydrological and landscape resource is found or in which peat products are processed and/or used. 'Use' is employed in a wide sense and includes both conservation and non-use[1].

On a global basis, responsible management of peatlands includes the conservation of the vast majority of pristine or semi-natural peatlands, most especially those of high conservation value. The SRPM acknowledges there are adverse impacts of many peatland uses and proposes mitigation measures to redress these, but it does not make value judgements regarding different uses of peatlands.

1.1 Extent of Peatlands

Peatlands cover an estimated area of 400 million hectares in some 180 countries (Figure 1), equivalent to 3% of the Earth's land surface. Detailed estimates of the extent of peatlands are given in Appendix 1 to Joosten and Clarke 2002.

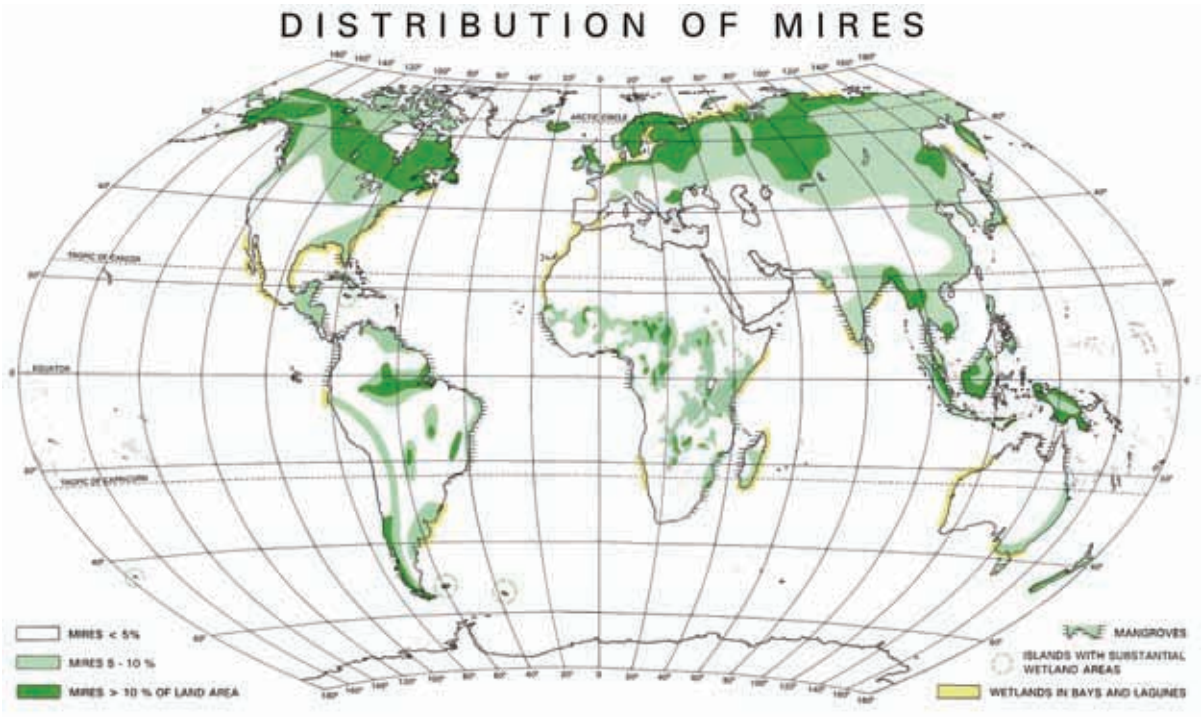


Figure 1: Extent and location of global mires and peatlands

[3] This strategy is inspired by the IMCG/IPS book "The Wise Use of Mires and Peatlands – Background and Principles including a Framework for Decision-making" published in 2002 and referred to in this document as Joosten & Clarke 2002. The terms used in this document rely strongly on commonly accepted definitions and their interpretations used in previous publications, principally those in Joosten & Clarke 2002. Some are explained in the Glossary. Wise Use of peatlands is defined as those uses for which reasonable people, now and in the future, will not attribute blame (Joosten & Clarke, 2002 p 19).

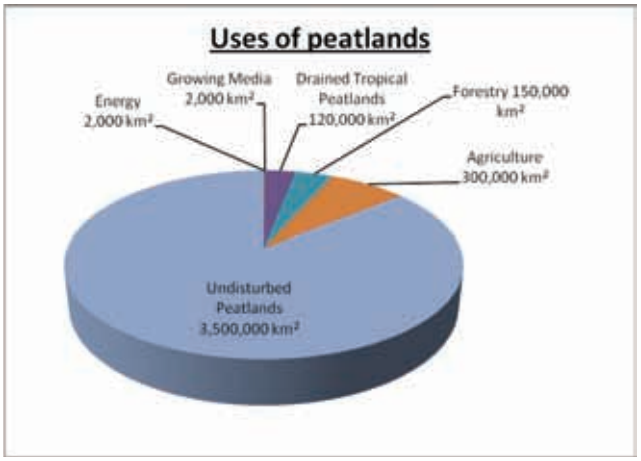
1.2 Peatland Functions and Values

Peatland functions include biodiversity maintenance, carbon and water storage, solute detention and water regulation. In addition to their intrinsic values, peatlands are valued for the wide variety of benefits they provide, as outlined on page 18 and detailed in Chapter 3 of Joosten and Clarke 2002. Values include for agriculture, forestry, culture and berry-picking and peat for energy, horticulture and certain chemical processes.

Peatlands are not only valued for their ecosystem services (water quality and storage, biodiversity, carbon, etc.) but, historically, they have fulfilled many human needs including food, energy, construction material, livestock bedding and in arts and health.

1.3 Uses of Peatlands and Peat

Peatlands are used and managed for many different purposes (Figure 2). Undrained peatlands are valuable habitats for a wide range of biodiversity and ecosystem services and many are managed as nature reserves. Drained peatlands are used mostly for agriculture and forestry[4] but also for peat extraction to provide energy and growing media. Peatlands are also 'used' or managed indirectly as a result of other landscape activities, for example, urbanization, mining, recreation, reservoir construction, mineral extraction and wind farms.



Based on information from: Strack (2008); International Peat Congress (2008)

Figure 2: Global Areas Used for Different Uses of Peatlands

This diagram does not include the area of peatland affected by indirect peat uses such as flooding for reservoir construction or extraction of minerals underneath the peat. Data for peatlands abandoned after economic uses are not available. Other specific uses which are not included are conservation (i.e. areas with a protected area status), reed culture, tourism, fisheries and traditional uses by indigenous people. "Drained tropical peatlands" includes peatlands used for oil palm and pulp wood plantations, forestry (including illegal logging), agriculture, infrastructure, etc.

New uses of peatland are being considered in the Southeast Asia where possibilities exist for carbon emissions reductions resulting from peatland degradation. Investments will involve hundreds of millions, possibly billions of US$.

[4] Joosten and Clarke 2002 p33.

In some parts of the world, the use of peatland has been intensive, altering completely the ecosystems of mires and impacting on landscapes. In others, the use has been more extensive causing less change to these habitats. The great majority of Arctic and Subarctic peatlands is still intact. In Europe peat has ceased to accumulate in over 50% of the former mire area and almost 20% no longer exists as peatland[5], while 45% of Indonesia's peat swamp forests have been deforested and drained for agriculture and plantations since 1980[6]. Approximately 80% of the original area of both tropical and non-tropical mires is still in largely pristine condition (undeveloped) although in about 25% of this peat accumulation may have stopped because of natural processes and recent climate change. It is estimated, therefore, that peat is still actively accumulating on 55% of the original global mire area[5].

2. AIMS AND USES OF THE STRATEGY

The aims of the Strategy for Responsible Peatland Management (SRPM) are to:

- Inform those involved in or responsible for peatland management of commonly agreed principles for the *'Wise Use of Peatlands'* and strategic objectives to implement responsible peatland management.
- Improve peatland management within the framework of '*Wise Use of Mires and Peatlands*'[1].
- Ensure that high conservation value peatlands are identified and conserved, 'utilised' peatlands are managed responsibly; and drained, degraded or otherwise irreversibly changed peatlands are rehabilitated by to restore as many ecological and landscape functions as possible.

2.1 Formulation of the Strategy

The initiative to develop the SRPM was taken by the IPS in collaboration with a range of stakeholders, including most members of the CC-GAP. The Strategy was developed through a series of meetings and consultation phases, as outlined in Annex 1.

2.2 Peatland Management

Peatland management is the organising, controlling, regulation and administration of a peatland for specified purposes. Management should be appropriate to the peatland type, use and socio-economic, cultural and environmental conditions.

2.3 Structure of the Strategy

The Strategy (Figure 3):

- begins with a vision statement (Section 2.4);
- identifies strategic objectives for responsible management under eight priorities grouped under three major headings (Section 3);

[5] Joosten and Clarke 2002
[6] Hooijer et al. 2005

- sets out specific actions for each priority in order to achieve the objectives (Section 4).

2.4 Vision for Responsible Peatland Management

Peatlands and their environmental and social values are unique biological, ecological and economic resources. The vision for responsible peatland management is:

Promoting Wise Use of peatlands through safeguarding their environmental, social and economic functions and respecting their local, regional and global values.

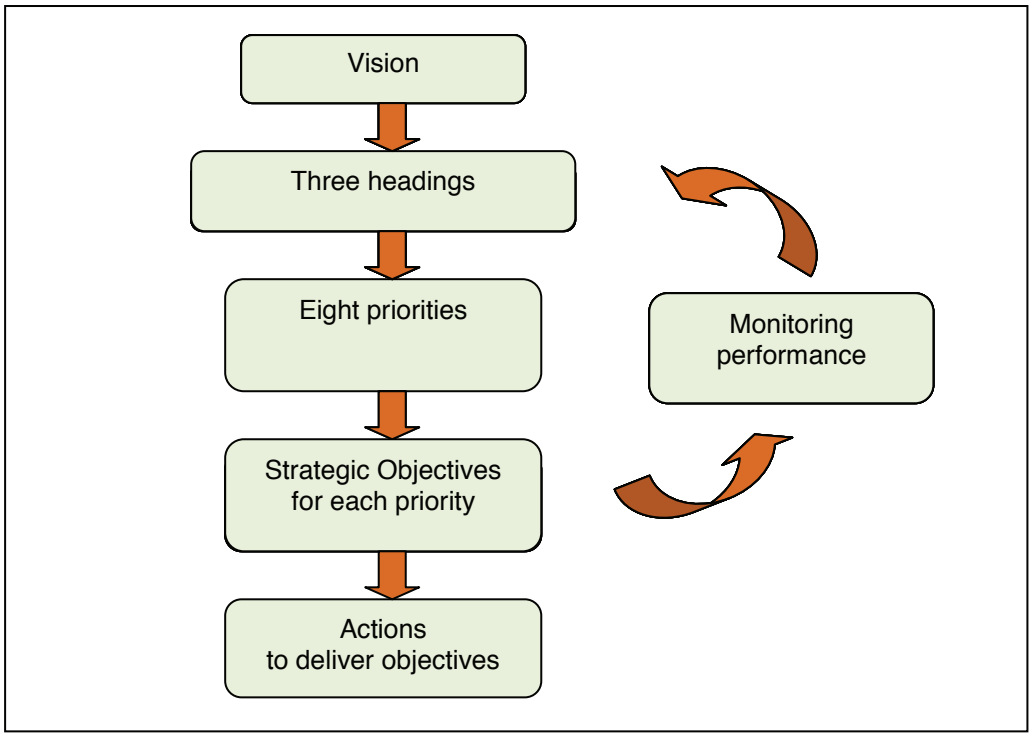


Figure 3: Structure of the Strategy for Responsible Peatland Management

3. ORGANISATION OF STRATEGIC OBJECTIVES

In order to deliver this vision, peatlands should be managed responsibly in accordance with strategic objectives. In what follows strategic objectives are focussed on the following priorities, grouped under three major headings.[7]

Values of and services provided by peatlands:

- Biodiversity
- Hydrology and Water regulation
- Climate and climate change processes

Activities related to peatlands:

- Economic
- After-use, rehabilitation and restoration

Means of promoting Wise Use:

- Human and institutional capacity and information dissemination

[7] These headings were identified from discussions held in Amsterdam and Belfast in 2009. The order in which they are listed does not imply their relative importance.

- Engagement of local people
- Good governance

Under each priority an 'introduction' explains why it has been selected; the 'objectives' indicate how it should be addressed; and the 'actions' outline how these can be achieved.

4. STRATEGIC OBJECTIVES AND ACTIONS

4.1 Biodiversity

4.1.1 Importance of peatlands for biodiversity

Peatlands are unique biological resources forming distinct ecosystems of local, national, regional and global importance for biodiversity maintenance at genetic, species and habitat levels. They contain species that are found only or mainly in peatlands and are home to some of the rarest species of plants and animals many of which are highly adapted to the specific habitat conditions. There are many different peatland types[8] with great variation in biodiversity between them. For example, tropical peatlands are amongst the most biodiverse ecosystems on the planet. The importance of habitat and biodiversity management and the protection of biological services and ecosystem processes have been recognized internationally through the Convention on Biological Diversity (CBD) 1992.

4.1.2 Objectives

Peatland management activities influencing habitats, species or genetic diversity of peatland ecosystems should:

1. Maintain, through government legislation and conservation designations and actions, the biodiversity and natural resource functions of representative examples of important mire types and semi-natural peatland ecosystems.
2. Recognise the importance of all peatlands as important reservoirs of biodiversity, and ecosystem services at the landscape level and integrate them within land use planning and management procedures.
3. Include actions to safeguard peatland ecosystem functions when planning and implementing management interventions for specific sites.
4. Include biodiversity protection and enhancement in after-use plans for peatlands used for peat extraction, forestry, agriculture and other uses.
5. Take actions to maintain and/or enhance biodiversity on drained, cut-over and degraded peatlands through appropriate planned management during and after use.
6. Maintain as much peatland biodiversity as possible in areas adjacent to those where peatlands may be lost forever (e.g. flooding for hydro-electricity generation or removal of the peat for sub-surface mineral extraction).

[8] Joosten and Clarke 2002 pp25-31

4.1.3 Actions

It is recommended:

- Formulate guidelines for peatland biodiversity conservation according to Wise Use principles[9] and recommendations of the International Convention on Biodiversity (CBD) (1992).
- Review, synthesize and integrate where appropriate available local knowledge and national and international research data on biodiversity of peatlands.
- Specify in management plans for protection or conservation of peatlands, activities necessary to ensure ongoing maintenance and enhancement of biodiversity and ecosystem functions and take into account the ecologically and hydrologically linked surroundings.
- Monitor peatland biodiversity regularly to provide feedback and information for improving management decisions.
- Include guidelines for after-use that employ best practice measures for the restoration of an optimal range of biodiversity and ecosystem services when planning for the rehabilitation or restoration of peatlands drained for economic uses (see Section 4.5).
- Support the compilation of "Red" lists of peatlands of high conservation value which are endangered and should be reserved for conservation.

4.2 Hydrology and Water Regulation

4.2.1 Role of peatlands in hydrological and landscape systems

The role of peatlands in water regulation depends on maintaining the integrity of their unique hydrology that is independent of but linked to the hydrology of the adjacent peatland and the wider landscape. Peatlands modify water quality and quantity, act as sinks for some substances and producers of others, and influence the temporal pattern of water delivery to rivers and lakes. Thus, the extent and condition of peatland within a river basin influences the habitat conditions for aquatic biota and the ecological status of water bodies. Depending on their position within the hydrological and landscape system, many peatlands also provide 'unseen' water regulation functions with considerable direct value to human society. Except under extreme weather conditions, headwater peatlands receive and store water from rainfall and release it gradually with beneficial effects on river flow downstream. Peatlands situated in lower parts of river basins act as transition areas for water, providing temporary storage for both rainfall and runoff, smoothing flow regimes over time. Peatlands located on floodplains can attenuate flood peaks moving downriver thereby providing a degree of natural flood protection to downstream human settlements.

[9] The 'Guidance Principles' (section 5.4. of Joosten and Clarke 2002, esp. principles 9-14).

4.2.2 Objectives

Peatland management activities that influence the level, quantity and quality of water both on site and in the surrounding landscape should:

1. Keep or restore water levels and flow regimes as close to the natural reference conditions as possible.
2. Carry out drainage and other management practices only to the extent required and avoid unnecessary deterioration in the quality and quantity of ground and surface waters.
3. Ensure that impacts of long-term drainage, peat removal and/or subsidence management activities will be limited to an extent that hydrological management can be implemented in a cost-effective way as part of an after-use strategy.

4.2.3 Actions

It is recommended:

- Drainage of peatland takes into account the importance of water quality, quantity and flow dynamics in the peatland itself and in adjacent and downstream locations.
- Water management on peatlands is based on best available knowledge and techniques and carried out according to international conventions and regional and national legislation and priorities.
- Effective flood and sediment control are part of all drainage activities.
- Water quality and quantity standards are measured against, and set in terms of, baselines of recognized standards on site and in surrounding areas.
- The minimum drainage necessary to enable current and future land use and maintenance are implemented.
- Peatland use does not result in the creation of vastly different surface levels that would make hydrological restoration difficult to achieve in a cost-effective way.
- Regular re-evaluation is carried out to ensure that best water management outcomes are achieved, using up-to-date practices and based on the results of continuing water quality, quantity and catchment monitoring.

4.3 Climate and climate change processes

4.3.1 Role of peatlands in climate change

Peatlands are dependent on climate, especially rainfall and temperature, for their formation and maintenance. Greenhouse gas exchange between the atmosphere and peatlands exhibits much spatial and temporal variation related to differences in climate, hydrology and management. Mires sequester large amounts of carbon dioxide from the atmosphere and peatlands have been major global carbon stores for millennia. Peatlands also emit CO_2 and CH_4, the amounts being influenced by temperature and water level, both of which are likely to be affected by removal of vegetation, drainage and future climate change. Agriculture on drained

peatlands and peat extraction lead to substantial emissions of carbon dioxide and, in the case of the former, also nitrous oxide (N_2O). Appropriate management can protect the carbon store in peatlands and suitable after-use methods of re-wetting and re-vegetating can decrease greenhouse gas emissions and create conditions for carbon sequestration and peat formation. Although the impacts of peatlands and their management on climate change and *vice versa* are not fully understood, it has recently become clear that the degradation of peatlands is contributing significantly to global greenhouse gas emissions.

4.3.2 Objectives

Peatland management should avoid increasing and, wherever possible, reduce human-induced greenhouse gas emissions from peatlands and protect their carbon stores through:

1. Planning and adopting management strategies, regimes and technologies that protect carbon stores and minimise greenhouse gas emissions from peatlands.

2. Planning and implementing peatland management and after-use actions that achieve lower greenhouse gas emissions than from current or previous use and increase the potential for greenhouse gas sequestration.

3. Preventing unnecessary[10] and illegal expansion of peatland utilisation.

4. Monitoring carbon stores and greenhouse gas emissions from peatlands in order to obtain information on the impacts of different management regimes and promote 'best practice'.

5. Ensuring that carbon values of peatlands are taken into account in peatland management planning.

6. Obtaining further information on the impact of peatland management on climate change processes and *vice versa*.

4.3.3 Actions

It is recommended that:

- The most recent scientific information on greenhouse gas fluxes should be taken into account in the formulation of peatland management plans.
- The carbon stores and carbon sequestration functions of peatlands should be protected and conserved in accordance with the requirements of international conventions and national statutory requirements and management plans should include mitigation measures to maximize peat carbon stores and minimize greenhouse gas emissions.
- Peatland managers should carry out carbon 'life cycle' analyses and use this information in designing management activities.

[10] Joosten and Clarke 2002 §5.6.5 (2) p135.

- Peatland after-use should have low CO_2 emission rates and increased carbon sequestration potential, taking into account the long time-scale involved and the other services provided by peatlands.
- Scientific information, awareness and understanding of the relationship between peatlands and climate change should be increased and how this will contribute to responsible management explained by:
    - providing information on the importance of peatland management in relation to climate change to public, corporate and government decision makers
    - encouraging the research community to provide clear science-based information
- The potential of peatland rehabilitation and other after-use for reducing emissions from peatland degradation is investigated as a means to compensate for carbon emissions elsewhere (e.g. peat-based industry). Carbon offsets could be a means for the peat-based industry to enhance carbon neutrality of its products.

4.4 Economic Activities

4.4.1 Reasons for economic activities

Peatlands, in addition to being of vital ecological value, have also been important economic resources in many countries where they have been used and valued for centuries for many different purposes. They have been a source of fuel, food and refuge to local communities but a large proportion are relatively inaccessible and have remained intact. Significant changes have taken place in the uses of peatlands during the last century. Greater demands for regional development, housing, energy, forestry, horticulture and agriculture have been among the causes of these changes. Peatlands provide income opportunities and welfare to local communities and are an important source of domestic energy in some countries. Peat is a predominant constituent of growing media, a valuable soil improver and is used in other products.

4.4.2 Objectives

Peatland management for economic purposes[11] should:

1. Prioritize degraded peatlands for economic use and avoid development of all or parts of pristine mires and peatlands of high conservation value (for their biodiversity or ecosystem services).
2. Recognise the economic benefits provided by largely intact peatlands through environmental services such as carbon capture, water regulation and biodiversity maintenance.
3. Adopt planning procedures for economic uses of peatlands that consider the interests and incorporate the views of all stakeholders equitably and are in accordance with relevant international legislation and conventions, national laws and regulations and reflect the Wise Use principles set out by Joosten & Clarke 2002.

[11] Although some specific economic uses are listed in this section, the objectives should be implemented in relation to all economic uses of peatlands (see Joosten and Clarke 2002 pp48-72)

4. Proposals for peatland after use (see Section 4.5) should be mandatory in the initial planning stage for economic use and provide not only specifications of the work programme but also financial provision to enable this to be carried out, monitored and maintained.
5. Economic activities on degraded peatlands should avoid negative impacts on hydrologically or ecologically linked pristine mires or peatlands that are of high conservation value (for their biodiversity or ecosystem services).
6. Consider use of degraded peatlands for the production of timber or agricultural crops and livestock production only when these are economically viable and socially necessary and if appropriate and effective mitigation of adverse impacts will be undertaken.
7. Consider use of peat and peatlands[12] for energy generation when it can be derived from degraded peatlands and where it is a necessary part of domestic energy policy, increases the efficiency of burning renewables or provides a crucial element in regional development.
8. Consider use of peat for horticulture, bedding and other purposes (for example, medical and health products, and activated carbon) when it can be derived from degraded peatlands and processed in an efficient manner that achieves high quality outputs, and minimises negative impacts on the environment.
9. Strive to develop suitable replacement substrates (in part or in whole) for peat in growing media and for other uses of peat.
10. Avoid deforestation and drainage of tropical peatlands for agriculture or plantations.

4.4.3 Actions

It is recommended to:

- Carry out environmental and social impact assessments at the planning stage of economic use and it should be a requirement of those responsible for developing and managing peatlands to:
  - Commission and pay for environmental and social impact assessments, including off-site impacts of the activity proportionate to the size of the area and the impact of the development.
  - Prepare comprehensive plans for peatland utilisation including after-use.
  - Select peatlands for future commercial utilization that have already been drained or in other ways degraded.
  - Apply best available practices, not entailing excessive cost[13], to minimize negative environmental impacts and increase economic efficiency.
  - Undertake consultation with key stakeholders.
  - Ensure consideration of both short and long term impacts.

- Ensure the use of peat and peatlands for energy and heat generation takes place in areas/regions where it is a necessary part of the local energy supply and based in regions where the use of peat is most economically and/or socially beneficial.

[12] Peatland can be used for energy generation even if peat is not a fuel, for example, flooding for hydroelectric schemes, excavation for mineral extraction (e.g. tar sand in Canada), and installation of wind farms.
[13] BATNEEC - Best Available Technology Not Entailing Excessive Cost

- Ensure the use of peat in horticulture and other applications is based on its suitability for the purpose intended and is used only when other technically, economically and environmentally suitable alternatives are unavailable.

- Promote research on the development of alternative and complementary growing media including cultivation of Sphagnum moss.

- Ensure the use of peatlands for agriculture (including paludiculture), forestry (including plantations), recreation and other purposes is in accordance with Wise Use principles and contained in a plan for future management and after-use.

- Review the profitability or productivity of agriculture and forestry on peatlands and consider more environmentally appropriate alternative uses.

- Establish an independent certification system to provide evidence of responsible management of peatlands in order to satisfy market demand for products and services originating from responsibly managed peatlands.

4.5 After-use, Rehabilitation and Restoration

4.5.1 Importance of planning for after-use

The Wise Use of peatlands for economic purposes requires planned after-use. There are several options for after-use of peatlands following economic use, including agriculture, forestry, recreation and wildlife habitat and biodiversity provision (nature conservation). The exact nature of after-use will likely be determined by the relevant planning authority and specified in the planning consent and license to operate. Peatlands used for nature conservation may also require rehabilitation measures to restore them to a condition in which they can maintain their biodiversity and reduce CO_2 emissions. The choices available for after-use will depend on peatland type and former management as well as the condition of the 'used' peatland. In terms of after-use options, peatlands may be managed using rewetting, rehabilitation or restoration measures. Meadows on peat can be re-wetted after long-term agricultural use as can forest land after deforestation. Re-wetting and revegetating with indigenous species can also be achieved in tropical peatlands after deforestation, drainage or fire. Planned after-use should be an integral part of mineral extraction beneath peatlands which causes degradation of the overlying peatland ecosystem.

4.5.2 Objectives

1. Peatland rehabilitation or restoration should return degraded peatlands to conditions in which ecosystem functions are as close as possible to natural conditions within the constraints of practicality and at reasonable cost.

2. Efficient procedures should be adopted to ensure that peatlands are not simply abandoned in a degraded state when their economic use ceases. Procedures may include, for example, obligations to implement rehabilitation, restoration or other after-use plans, including contingency provisions.

3. Prevent further drainage and degradation of abandoned peatlands and target them for restoration with either government initiatives or as government projects with industry support.

4.5.3 Actions

It is recommended:

- Prepare mandatory after-use plans during the initial planning process of peatland management and in sufficient time for a wide range of opinions and options still to be incorporated.
- Identify the parties that will be responsible for the implementation of after-use plans during the planning process and ensure they have access to the required resources to achieve success.
- Ensure that when peatland use ceases the landscape conditions are suitable for restoration and after use.
- Use the latest scientific knowledge of peatland ecosystem functions to derive acceptable and tested after-use management practices for the restoration of peatlands.
- Take into account stakeholder views on the after-use of peatlands as well as local peatland ownership issues in order to help ensure the sustainability of the measures taken.
- Monitor and review the implementation of after-use programmes over a realistic timescale and modify procedures if objectives are not being realised; consult stakeholders on their effectiveness, taking into account land ownership issues and traditional rights.

4.6 Human and Institutional Capacity and Information Dissemination

4.6.1 Importance of disseminating information among stakeholders and the public

For the successful adoption and implementation of the SRPM, stakeholders (e.g. government administrations, research institutes, the private sector, NGOs, local communities and individuals) need to understand the various issues, respect each other's views and work together. To promote this, education, training and information dissemination are required that focus on the objectives and actions of the Strategy. It is important to increase the knowledge, skills and understanding of all stakeholders and to promote the consensus needed to bring about the desired results.

4.6.2 Objectives

1. Improve the knowledge and expertise on peatlands of all stakeholders involved in their management and facilitate information dissemination and communication with other stakeholders, including local communities, individuals and the public.
2. Promote better understanding of peatland functions and their responses to climate change and management operations by collating and assessing data on different types of peatland and by sharing information[14].
3. Promote better understanding of the cultural, archaeological and palaeological value of peatlands.

4.6.3 Actions

It is recommended:

- Invest in education, training and information dissemination on:
    - Peatland management plans
    - Environmental, social and economic values of peatland management and peat-based products
    - Peatland biodiversity, habitats and natural resource functions
    - Peatland conservation
    - Interactions between greenhouse gas emissions and peatland management
    - Rehabilitation, restoration and after-use management.

- Share best practice information and expertise amongst stakeholders involved in peatland management, including conservation organisations and the peat industry, for example, via the Internet.

- Support provision of institutional training facilities to provide specific programmes in support of peatlands as a natural resource comparable to forestry, fish and wildlife.

- Involve stakeholders in awareness-raising

4.7 Engagement of Local People

4.7.1 Importance of understanding key issues

The ultimate goal of local community engagement in the decision-making and implementation processes involved in peatland management is to provide a sense of participation which in turn helps local people understand the key issues and priorities. In return, other stakeholders, especially private sector and government agencies, will discover, understand and appreciate better, local knowledge, viewpoints, skills and practices.

[14] E.g. databases and meetings

4.7.2 Objectives

Responsible peatland management will improve local economies and may change environmental and social structures. In all peatland management the objectives should be to:

1. Promote livelihood opportunities for local people, respect their rights, heritage and traditions, and take into account gender issues.
2. Respect and implement the principle of free, informed and prior consent.
3. Provide:
   - information on peatland management to landowners and local people
   - encouragment to landowners and local people to undertake responsible management of peatlands in their ownership and abide by common law and respect traditional rights.
4. Hold meetings with local communities and people to discuss how they can contribute to the implementation of responsible peatland management.

4.7.3 Actions

It is recommended to:

- Integrate peatland management into the larger context of landscape- and community-based land use planning and show how:
  - Stakeholders[15] can contribute to the decision making and implementation processes.
  - Managers can provide stakeholders with opportunities to contribute to the planning and management processes under existing frameworks for land use planning in the region and strive to improve these.

- Apply open and transparent planning and management procedures, including dissemination of information, early in the planning process and stress the significance of peatlands to local people and the importance of considering and including their views.

- Consider possible alternatives for peatland after-use that provide the best possible advantages for local people and the environment.

4.8 Good Governance[16]

4.8.1 Importance of good governance and law enforcement

'Governance' is the exercise of power or authority – political, economic, administrative or otherwise – to manage resources and affairs. It comprises the mechanisms, processes and institutions through which stakeholders and individuals articulate their interests, exercise their legal rights, meet their obligations and reconcile their differences. 'Good governance' means competent management of a resource and affairs in a manner that is open, transparent,

[15] Stakeholders include landowners and land users, indigenous and other local people, and others who are interested in or affected by peatland management. See definition 27 in the Glossary.
[16] See definition 10 in the Glossary.

accountable, equitable and responsive to people's needs. Good governance and law enforcement contribute to responsible management of peatland natural resources.

4.8.2 Objectives

Objectives for the good governance of peatland management should include the following:

1. Regulatory frameworks and legislation at international, regional, national and sub-national levels to ensure responsible management of peatlands.
2. Policies on peatland management that follow the principles of Wise Use, including, for example, transparent and open processes for decision making.
3. Peatland planning and management based on sound scientific knowledge.
4. Voluntary mechanisms (for example, funds, certification, payments for ecosystem services) that complement legislation, regulatory frameworks and statements of responsible management principles in relevant international agreements.
5. Principles, criteria or guidance that provide greatest guarantee for maintaining biodiversity, peatland ecosystem services and social/cultural values in the event that the actions the SRPM overlap with those of other voluntary mechanisms of industry/sectors involved in peatland use (e.g. Round Table for Sustainable Palm Oil).

4.8.3 Actions

It is recommended:

- Governments provide updated legislation governing peatlands and enforce it appropriately.

- Peatland managers act in accordance with national legislation, international agreements and Wise Use principles in each country of operation.

5. FOLLOW-UP

1. The parties to this Strategy for Responsible Peatland Management are those who sign it or otherwise indicate their adherence to it. They undertake to operate in accordance with its objectives and actions, believing that this Strategy provides a viable framework within which the Wise Use of peatlands can be implemented and improved. Parties that do not have responsibility for managing peatlands should accept that the provisions of the SRPM are appropriate to them if they process, distribute, sell or regulate peat-containing products. Parties that have responsibility for peatland management and the supply chain should incorporate the provisions of the SRPM into their own peatland management activities and plans. The parties that sign up to or otherwise support this Strategy undertake to improve their peatland management in accordance with it.

2. The Strategy has been developed as a stand-alone instrument and should be used to improve standards of peatland management and to increase knowledge of good peatland management among governments, regulatory bodies and peatland managers.

3. The Strategy is the responsibility of the stakeholders named in Annex 2 who contributed to its development. The Strategy will be distributed on their behalf by the IPS to these stakeholders and to other international, regional and national governmental and non-governmental organisations and other appropriate bodies and individuals.

4. The Strategy should be used as the basis for the development of a certification system for peatland and peat products. The IPS should initiate this process.

5. The Guidelines for the Practical Implementation of Wise Use which the IPS has been developing should be completed through a participative process. These Guidelines should assist in the practical implementation of this Strategy.

6. The IPS will convene meetings of the parties to the Strategy every two years to review how it has been implemented.

GLOSSARY

1. After-use of peatland: The planned rehabilitation, restoration or conversion of a peatland following drainage for economic use. After-use may include restoration of peatland ecosystem functions including biodiversity, rehabilitation of peatland processes and/or services or changing the management of a peatland for other purposes, e.g. agriculture, forestry, bird-watching areas, angling, nature walks or construction development.

2. Biodiversity: The variability of living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and adherent ecosystems. Synonym to Biological diversity. *(Source: United Nations Convention on Biological Diversity (1992)).*

3. Certification: An attestation by an independent body that a product or process meets specified criteria: the system whereby such a statement is audited, verified and communicated. In the case of peatlands certification would give assurance that a particular peatland was managed to meet the social, economic and ecological needs of present and future generations and that products or services originating from the peatland also met those needs.

4. Conservation: The act of keeping something entire, keeping unchanged, preservation from loss. Used in the sense of a deliberate or political decision to preserve. *(Cf Joosten and Clarke 2002 p164.)*

5. Degraded peatland: A peatland which had lost its original functions, whose peat-forming and/or ecosystem functions have been damaged or destroyed. (A*fter Joosten and Clarke 2002 p165.)*

6. Ecology: (a) The science of the relationships between organisms and their environments; (b) the relationship between organisms and their environment. *(Joosten and Clarke 2002 p165.)*

7. Economic use: Any use of a peatland which contributes to economic benefits. *(After Joosten and Clarke 2002 p165.)*

8. Ecosystem services: services provided by the natural environment that benefit people. These benefits include:

- Resources for basic survival, such as clean air and water;
- A contribution to good physical and mental health, for example through access to green spaces, both urban and rural, and genetic resources for medicines;
- Protection from hazards, through the regulation of our climate and water cycle;
- Support for a strong and healthy economy, through raw materials for industry and agriculture, or through tourism and recreation; and

Social, cultural and educational benefits, and wellbeing and inspiration from interaction with nature.

While there is no single, agreed method of categorising all ecosystem services, the Millennium Ecosystem Assessment MEA) frame work is widely accepted and is seen as a useful starting

point. The MEA identifies four broad categories of ecosystem service which all lead to different benefits:

- Provisioning services: we obtain products from ecosystems such as food, fibre medicines
- Regulating services: we benefit from the results of ecosystem processes such as water purification, air quality maintenance and climate regulation
- Cultural services: we gain non-material benefits from our interaction with the natural environment such as education and well-being
- Supporting services: functions that are necessary for the production of other ecosystem services from which we benefit, such as soil formation and nutrient cycling

(www.defra.gov.uk/environment/policy/natural-environ/ecosystems/index.htm)

9. Environmental: The interaction of a peatland with the surrounding area, including the peatlands' biodiversity value, ecosystem services and climate impacts. As used in this document the word includes 'ecological'.

10. Good governance: This term is used by the United Nations to describe how public institutions conduct public affairs and manage public resources in order to guarantee the realization of human rights. According to the UN, good governance has 8 characteristics:

1. Consensus orientated
2. Following the rule of law
3. Effective and efficient
4. Accountable
5. Transparent
6. Responsive
7. Equitable and inclusive.

11. Greenhouse gas (GHG): Any gas in the atmosphere that contributes to the greenhouse effect. These include carbon dioxide, methane, ozone, nitrous oxide, CFCs, and water vapour. Most occur naturally as well as being created by human activity. (*See also http://unfccc.int/resource/cd_roms/na1/ghg_inventories/english/8_glossary/Glossary.htm*)

12. Interested party: A person or group having an interest in the policies and operations of an activity or business with a willingness to participate in related decision-making and/or implementation at an appropriate level. Interested parties include peatland managers, industry, non-governmental organizations (NGOs), social groups, relevant government bodies, etc.

13. Local people: Local people are any individuals or groups of people in the area who are affected directly or indirectly by peatland management decisions.

14. Mire: A peatland where peat is currently being formed and accumulating. *(Joosten and Clarke 2002 p170.)*

15. Mitigation: Any process which seeks to reduce negative environmental consequences of an intervention in a peatland.

16. Monitor: To periodically review whether the plan for a peatland has been followed, compare the actual outcomes with those planned, and to take remedial action where necessary.

17. Paludiculture: The cultivation of biomass on wet and re-wetted peatlands.

18. Peat: Sedentarily accumulated material consisting of at least 30% (dry weight) of dead organic material. *(Joosten and Clarke 2002 p172.)*

19. Peatland: An area with or without vegetation with a naturally accumulated peat layer at the surface. *(Joosten and Clarke 2002 p172.)*

20. Peatland rehabilitation: The reparation of ecosystem processes, productivity and services of the former peatland, but does not imply the re-establishment of the pre-existing biotic integrity in terms of species composition and community structure. *(Source: SERI 2004)*

21. Peatland restoration: The process of assisting the recovery of peatland that has been degraded or damaged to as near as possible its original natural condition. *(Source: SERI 2004)*

22. Protection: Preservation, maintenance and enhancement of specific biological, social or cultural value.

23. Public consultation/participation: A regulatory process by which the public's input on matters affecting them is sought, a consultation process in which all stakeholders can actively participate. *(After Joosten and Clarke 2002 p173.)*

Rehabilitation: See Peatland Rehabilitation.

24. Responsible peatland management: Responsible peatland management is implementation of Wise Use of peatlands through safeguarding their environmental, social and economic functions and respecting local, regional and global rights and values.

25. Resource: An available supply that can be drawn on when needed. *(Joosten and Clarke 2002 p. 174)*

Restoration: See Peatland Restoration.

26. Semi-natural peatlands: Peatlands that have been used and/or drained in the past or that are partially drained but which retain some peat-forming characteristics or potential and/or peatland ecosystem functions'.

27. Stakeholders: All persons and organizations having a direct interest. *(Joosten and Clarke 2002 p175.)*

28. Uses of peatlands: Covers all uses including conservation and non-use. *(Joosten and Clarke 2002 p23.)*

29. Wise use of peatlands: Use of peatlands for which reasonable people now and in the future will not attribute blame. Use includes non-use (e.g. conservation). *(Joosten and Clarke 2002 p19.)*

ANNEX 1

Development of the Strategy for Responsible Peatland Management

A1.1 The process followed in developing the Strategy

The initiative to develop the SRPM was taken by the **International Peat Society** (IPS). The IPS is an international, non-governmental and non-profit organization with approximately 1,400 members from 29 countries. It is dedicated to fostering the advancement, exchange and communication of scientific, technical and social knowledge and understanding for the wise use of peatlands and peat. Further information is available at www.peatsociety.org.

The first steps in preparing a Strategy for responsible peatland management were taken in 2008. At a meeting in Brussels in March 2008 the Canadian (CSPMA) and European (EPAGMA) peat industries encouraged the IPS to prepare a plan of how to create

1) a global peatland strategy
2) following that a peatland management certification scheme.

The plan was prepared by the IPS and it was presented during the 13th International Peat Congress in June 2008 and was further advanced at a meeting in Helsinki in November 2008. A plan and timetable were established in 2008 and early 2009. In February 2009 a meeting was held in Amsterdam which was attended by a representative group of participants from the IPS, other NGOs and other organisations. This meeting initiated the drafting of the Strategy. A second meeting was held in Belfast in April 2009 and following this a draft document was prepared by the consultants INDUFOR and was circulated. This was followed by a period of consultation.

Many submissions were received and the consultants attempted to take into account the suggestions made. However, the strict timetable which had been adopted inhibited full consideration of some of the suggestions received. Following a period of consultation and reflection, some twenty five organisations agreed to sign the Strategy which had resulted from the Amsterdam and Belfast meetings and the subsequent consultation periods. As provided for in the original plan, a seminar was convened in Brussels in October 2009 to explain the document and to arrange for its signature.

At this point it became clear that a number of IPS members and NGOs who had participated in the process were not satisfied with the document, and it was decided that the Brussels seminar would be changed into a meeting to chart a way ahead.

This meeting appointed a re-drafting group to produce a new draft which would take full account of all the submissions received and established an outline programme for the preparation of a new draft Strategy. A re-draft was prepared and circulated in January 2010. The many submissions then received were used to prepare another draft which was ready for circulation in early May 2010. Subsequent re-drafting and circulation resulted in a near-final draft which was considered at an Open Forum in Amsterdam in October 2010. That meeting amended and adopted the final document.

A1.2 Publications of international conventions and other organisations consulted

International agreements which informed the development of the Strategy included:

- The Ramsar Convention on Wetlands (1971) and its implementation resolutions and recommmendations including Guidelines for Global Action on Peatlands (Resolution VIII.17) and the Co-ordinating Committee for Global Action on Peatlands (CC-GAP).
- The Convention on Biodiversity (1992)
- The United Nations Framework Convention on Climate Change (UNFCCC) (1994)
- The Kyoto Protocol (1997)
- UN agreement on human rights (1994/1997)
- The Convention on International Trade in Endangered Species – CITES (1975)
- Conventions of the Internatiional Labour Organisation (ILO)

The drafting of the Strategy also benefitted from the following publications:

- EPAGMA, 2008, Socio-economic impact of the peat and growing media industry on horticulture in the EU.
- Gorham, E.1991. Northern Peatlands: role in the carbon cycle and probable responses to climate warming. Ecological Applications 1 (2), 182-195.
- Hood, G. 2007. De-mystfying the role of IPS in CC-GAP. Peatlands International, 2/7. P. 11.
- Joosten, H. and Clarke, D. 2002. Wise Use of Mires and Peatlands. Background and Principles Including a Framework for Decision-Making. International Mire Conservation Group and International Peat Society, Jyväskylä, Finland. 303 pp. ISBN 951-977-44-8-3
- Minaeva, T. and Joosten, H. 2009. Ramsar COP10 and peatlands. IMCG Newsletter 1/2099. Pp. 9-13.
- Parish, F., Sirin, A., Charman, D., Joosten, H., Minayeva, T., Silvius, M. and Stringer, L. (Eds.) 2008. Assessment on Peatlands, Biodiversity and Climate Change: Main Report. Global Environment Centre, Kuala Lumpur and Wetlands International, Wageningen.
- Salathe, T. 2007. What is the Co-ordination Committee for Global Action on Peatlands? Peatlands International, 2/2007. Pp. 9-10.
- Strack, M. 2008. Peatlands and Climate Change. International Peat Society, Jyväskylä, Finland. 233 pp. ISBN 978-952-99401-1-0

A1.3 Chronology of meetings of IPS and IMCG, Ramsar COPs and CC-GAP leading to formulation of the SRPM

MEETINGS OF IPS AND IMCG

Surwold, Germany November 1997

- This was the first meeting between IPS and IMCG. The main objectives were:
    - Provide an opportunity for information exchange
    - Explore opportunities for actions jointly or separately that create linkages between the IPS and IMCG with other global peatland and mire interested agencies
    - Establish the basis for ongoing co-operation and dialogue on global peatland science

    - Promote recognition of IPS and IMCG as active partners in global peatland and mire conservation, sustainable resource use and management
- 12 key issues were selected for detailed discussion including wise use and defining choices and values for peatland use.
- It was agreed that IPS and IMCG should establish a Joint Working Group to prepare a Discussion Paper on Wise Use Guidelines for Global Peatlands and Mires.
- It was decided that IPS and IMCG should have at least one joint meeting of selected participants and Board members each year to focus on key issues of mutual interest.

Freising, Germany November 1999

- This meeting reviewed the progress towards achieving the Action Points agreed at Surwold in 1997.
- The draft Guidelines for Global Action on Peatlands had been submitted to Ramsar COP8 in Costa Rica and the ensuing decisions were discussed.
- A REVISED Global Action Plan was prepared and transmitted to the Ramsar Standing Committee on 2 December 1999 for immediate consideration.
- Specific details of step-wise implementation of the GGAP were also discussed and the Joint Wise Use Working Group would continue to develop the *Wise Use Guidelines for Global Mires and Peatlands* and prepare a new draft for discussion in August 2000 during the IPS/IMCG meetings in Canada in association with the 11th International Peat Congress.
- This meeting established a "path forward" for this Action Plan recognising that partners in its development were committed to tabling a final version at Ramsar COP8 while fostering specific and local actions universally using the Draft Action Plan as a guide in the interim.
- It was agreed the Action Plan cannot encapsulate all the detail many specific interests would like as this would likely frustrate attempts to finalize and obtain universal acceptance of the text.

RAMSAR CONVENTIONS OF CONTRACTING PARTIES

COP6 1996 BRISBANE, AUSTRALIA

- The Contracting Parties to the Ramsar Convention adopted at COP6 Recommendation VI.1 on the "Conservation of Peatlands" encouraging further cooperation on wise use, sustainable development, and conservation of global peatlands. Subsequently, these points were taken up by two major non-governmental peatland stakeholder networks: the International Peat Society (IPS) and the International Mire Conservation Group (IMCG) agreeing in 1997 to prepare jointly a document on the wise use of mires and peatlands.

COP7 1999 SAN JOSÉ, COSTA RICA

- COP7 adopted Recommendation 7.1 on the "Wise Use of Peatlands" with a "Draft Global Action Plan for the Wise Use and Management of Peatlands". The partners in this draft action plan decided to continue its further development in order to prepare a revised plan for COP8 and to start implementation of its key elements.

COP8 2002, VALENCIA, SPAIN

- COP8 adopted Resolution VIII.17 that provided revised "Guidelines for Global Action on Peatlands". COP8 was also the occasion for IPS and IMCG to present the result of their common work, a "Statement on the Wise Use of Peatlands" and the book *Wise Use of Mires and Peatlands – Background and Principles Including a Framework for Decision-making*.

- Resolution VIII.17 Guidelines for Global Action on Peatland "Recognizes that peatlands…are a vital part of the world's wetland resources" and "Recognizes also the importance of peatlands to the maintenance of global biodiversity and for the storage of water and carbon, which constitute functions vital to the world's climate system".

- The Resolution also "Requests the Ramsar Bureau…to establish a Coordinating Committee for Global Action on Peatlands…to prepare an implementation plan for global action on peatlands". The open-ended Committee consisted of peatland experts representing "interested Contracting Parties, the Scientific and Technical Review Panel (STRP), the International Mire Conservation Group, the International Peat Society, the Convention's International Organization Partners and other non-governmental organisations, the private sector and other bodies", including the secretariats of CBD and UNFCCC.

- The Resolution furthermore "Encourages Contracting Parties and others to identify and make available sources of funds in order that the activities identified in this implementation plan can be undertaken", and "Requests that a report on the progress in implementing these Guidelines, including recommendations on future priorities, be submitted to Ramsar COP9."

COP9 2005, KAMPALA, UGANDA

- COP9 adopted as a key area the "full implementation of the *Guidelines for Global Action on Peatlands* through the CC-GAP" while at the same time stressing that this still poses a substantial challenge to all peatland partners, governmental, institutional and private.

- Resolution IX.2 of COP9 focuses on the future implementation of scientific and technical aspects. Emphasis was placed on dissemination of information, monitoring implementation of the *Guidelines* adopted in 2002 by Parties and others, identification of gaps and assistance with fundraising for further implementation.

COP10 2008, CHANGWON, SOUTH KOREA

- Resolution X.24 urges Parties and others to "take urgent action…to reduce the degradation, promote restoration, improve management practices of peatlands and other wetland types that are significant GHG sinks."

- The Resolution also encourages Parties and other organizations to undertake…studies of the role of wetlands in carbon storage and sequestration, in adaptation to climate change, including for flood mitigation and water supply."

- Resolution X.26 “Wetlands and Extractive Industries” urges Parties, in considering the environmental impacts of extractive industries on peatlands, to take appropriate measures/actions, including *inter alia* directing extractive industries to already drained peatlands…”

THE GLOBAL PEATLAND INITIATIVE (GPI)

- The Global Peatland Initiative (GPI) was formed in 2001 as an operational instrument to foster national, regional and international partnerships of government, private sector and non-government agencies, and to fund specific actions allied to Wise Use of Peatlands. GPI is a partnership of Alterra (Netherlands), IMCG, IPS, IUCN (Netherlands Committee), the International Commission on Irrigation and Drainage (ICID), and Wetlands International (WI). GPI is managed by Wetlands International and in its early years obtained significant funding from the Netherlands Ministry of Foreign Affairs (DGIS).

- To date, its main outputs are the establishment of regional networks for wise use of peatlands in South America, southern Africa and SE Asia, a number of national and regional peatland inventories, a clearer understanding of the linkage between peatlands and local livelihoods, and more attention for peatlands in international policy platforms such as the Convention for Biodiversity (CBD) and the UN Framework Convention on Climate Change (UNFCCC). Over 50 projects around the world were coordinated by GPI by using the existing networks of its partners.

THE COORDINATING COMMITTEE FOR GLOBAL ACTION ON PEATLANDS (CC-GAP)

- The Coordinating Committee was established in 2003. Nineteen experts, drawn from the bodies listed in Ramsar Resolution VII.17 met in Wageningen (Netherlands) on 5-6 November 2003. Funding for this initial meeting was provided through the Global Peatlands Initiative (GPI) with a grant from the Government of the Netherlands (DGIS).

- A second meeting of the CC-GAP took place in Tampere (Finland) on 6 June 2004 where 16 experts met in conjunction with the 12th International Peat Congress. Funding and administrative support was provided by IPS and the GPI secretariat.

- The Committee, consisting of 27 experts, met for a third time, again in Wageningen, on 29-30 October 2004. Funding and administrative support was provided by the IPS, the Dutch Government (through Alterra) and the GPI secretariat.

- The CC-GAP prepared a draft implementation plan for the GGAP in October 2005 containing recommendations to Ramsar Parties, the international donor communities and others, an overview of progress with implementation of the *Guidelines*, and a list of actions needed in the fields of peatlands and climate change, peatlands and biodiversity, peatlands and water, peatlands and poverty, and peatlands wise use.

- In 2005, CC-GAP prepared an awareness brochure: *Peatlands. Do You Care?* This was distributed to delegates attending Ramsar COP9 and was also used for the CBD ASBSTTA and UNFCCC meetings in late 2005.

- At its last meeting held in Espoo, Finland in July 2006, amongst other decisions, it was decided to redraft the existing texts on implementation of the GGAP and to prepare a document that would be published as a Ramsar Technical Report. It was also decided to prepare side events and working papers for meetings of UNFCCC and CBD.

- Importantly, it was also decided to establish an executive team of the CC-GAP to deal with intersessional, upcoming and priority issues, urgent short-term requirements, and to prepare meetings and their agendas. This team consisted of Tobias Salathe (Ramsar Bureau), Herbert Diemont and Marcel Silvius (GPI), Jaakko Silpola (IPS) and Hans Joosten (IMCG).

- As far as is known this Executive Team has never met and there has not been a meeting of CC-GAP since July 2006.

A1.4 Organizations consulted or involved in the development of the Strategy

The following organizations or their individual employees have actively contributed to the Strategy by attending meetings and/or giving written feedback:

Non-government Organizations

Ducks Unlimited Canada
International Mire Conservation Group (IMCG)
International Society for Horticultural Science (ISHS)
Irish Peatland Conservation Council (IPCC)
Wetlands International (WI)

IPS Commissions (1-9)

I Survey, Stratigraphy and Classification of Peatlands
II Industrial Utilisation of Peat and Peatlands
III Agricultural Use of Peatlands
IV Physical, Biological and Chemical Characteristics of Peat
V After-Use of Cut-Over Peatlands
VI Use of Peat in Balneology, Medicine and Therapeutics
VII Forestry on Peatlands
VIII Cultural Aspects of Peat and Peatlands
IX Tropical Peatlands

National Committees of IPS

Canadian Society for Peat and Peatlands
Estonian Peat Association
Finnish Peatland Society
German Peat Society
Hungarian Peat Society
Irish Peat Society
Latvian Peat Producer's Association
Lithuanian Peat Producer's Association
Malaysian Peat Society
IPS National Committee of the Netherlands
IPS Polish National Committee

Russian Peat Society Rostorf
IPS Swedish National Committee
IPS National Committee of the UK
IPS National Committee of the USA

Research institutes

All-Russian Institute of the Peat Industry, St. Petersburg, Russia
Alterra Research Institute, Wageningen University and Research Center, The Netherlands
Department of Natural Resources, Canada
Finnish Forest Research Institute
Geological Survey of Finland
Geological Survey of Lower Saxony, Germany
Greifswald University, Germany
Helsinki University, Finland
Humboldt Universität zu Berlin, Germany
Institute of Botany, Vilnius, Lithuania
James Cook University, Australia
Peatland Ecology Research Group, Université Laval, Canada
Polish Academy of Sciences
Russian Academy of Sciences
Swedish University of Agricultural Sciences
Tropical Peat Research Laboratory, Malaysia
University of Applied Sciences Zittau/Görlitz, Germany
University of Dundee, United Kingdom
University of Eastern Finland
University of Latvia
University of Life Sciences Warsaw, Poland
University of Malaysia Sarawak
University of Nottingham, United Kingdom
University of Pannonia, Hungary
University of Warmia and Mazury, Poland
University of Waterloo, Canada
University Putra Malaysia
VTT Technical Research Centre of Finland
Wageningen University and Research Centre, the Netherlands

Industry Associations

Association of Finnish Peat Industries
Canadian Sphagnum Peat Moss Association
Chambre Synd. des Améliorants Organiques et Supports de Culture France
European Peat and Growing Media Association
Industrieverband Garten, Germany
Sarawak Oil Palm Plantation Owners Association
Swedish Peat Producer's Association

Peat Producing Companies

AS Kraver, Estonia
Bord na Móna Plc, Ireland
Florentaise, France
Griendtsveen AG, Germany
Klasmann-Deilmann GmbH, Germany
Neova AB, Sweden
Northern Peat and Moss Co., United Kingdom
Peltracom, Belgium
Rostopprom, Russia
Sphagnum Products B.V., Estonia / the Netherlands
Turveruukki Oy, Finland
Vapo Oy, Finland

Other organizations

Agri-Food and Biosciences Institute (AFBI), United Kingdom
Biopterre's Bioproducts Development Center, Canada
Center for International Cooperation in Sustainable Management of Tropical Peatland, Indonesia
Department of Agriculture and Rural Development, United Kingdom
Department Water Affairs, Lesotho
Forest Carbon Offsets, USA
Ministry of Agriculture, the Netherlands
Ministry of Environment, the Netherlands
National Parks and Wildlife Service, Ireland
Natural Resources and Environment Board, Sarawak, Malaysia
RHP Foundation, the Netherlands
Sarawak State Government, Malaysia
United Nations Environment Programme (UNEP)

IPS Executive Board
IPS Scientific Advisory Board

Other organizations contacted:

CARE International
Consultative Group on International Agricultural Research (CGIAR)
Convention on Biological Diversity
Convention on Int. Trade in Endangered Species of Wild Fauna and Flora (CITES)
Food and Agriculture Organization of the United Nations (FAO)
Global Environment Centre Malaysia (GEC)
International Commission of Agricultural and Biosystems Engineering (CIGR)
International Commission on Irrigation and Drainage (ICID)
International Labour Organization (ILO)
International Union for Conservation of Nature (IUCN)
International Union of Forest Research Organizations (IUFRO)

International Water Association (IWA)
International Water Management Institute (IMWI)
International Water Resources Association (IWRA)
Ramsar Convention on Wetlands
Society for Ecological Restoration International (SER)
Society of Wetland Scientists (SWS)
United Nations Conference on Trade and Development (UNCTAD)
United Nations Development Programme (UNDP)
United Nations Division for Sustainable Development (CSD)
United Nations Educational, Scientific and Cultural Organization (UNESCO)
United Nations Framework Convention on Climate Change (UNFCCC)
United Nations Research Institute for Social Development (UNRISD)
World Energy Council (WEC)
World Water Council (WWC)
World Wide Fund for Nature (WWF)

IPS Czech National Committee
IPS Indonesian National Committee
IPS Norwegian National Committee

In addition

All IPS members available by email, about 1,000 peat and peatland experts
Visitors to the IPS website

The Strategy for Responsible Peatland Management is a joint document of stakeholders involved in peat and peatland matters, initiated by the International Peat Society (IPS).

The first steps in preparing a Strategy for responsible peatland management were taken in 2008 when the IPS presented a plan for a global peatland strategy and a peatland management certification scheme at its 13th International Peat Congress in Ireland.

During 2008 - 2010, meetings of representatives of scientific institutes, industrial corporations and international non-government organisations were held in Helsinki, Amsterdam, Belfast, Brussels and Jyväskylä to finalize and further advance the Strategy. Each of them was followed by a period of consultation and reflection. The final document was edited by a steering group of the IPS President and Chair of the IPS Scientific Advisory Board and finally adopted at a seminar in Amsterdam in October 2010.

The IPS is an international, non-governmental and non-profit organisation with approximately 1,400 members from 30 countries. It is dedicated to fostering the advancement, exchange and communication of scientific, technical and social knowledge and understanding for the wise use of peatlands and peat.

To achieve its goals, the IPS via its Commissions and National Committees regularly organises conferences, symposia and workshops, publishes research results from science and industry and serves in general as a forum to bring together experts from different fields of business, science, culture and regulatory bodies dealing with peat and peatlands.

Further information is available at www.peatsociety.org.