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**PRE-UNCTAD X SEMINAR ON
MAKING FDI WORK FOR SUSTAINABLE
DEVELOPMENT**

Geneva, 15 November 1999

**Background note prepared by the
UNCTAD secretariat**

Contents

I. BACKGROUND.....	3
A. CONTEXT	3
B. OBJECTIVES.....	4
C. UNCTAD WORK.....	5
II. SUBSTANTIVE ISSUES.....	6
A. ENVIRONMENTAL MANAGEMENT PRACTICES OF TNCs	6
1. <i>TNC environmental management</i>	6
2. <i>The issues</i>	8
3. <i>Key questions for consideration</i>	9
B. TRANSFER AND DIFFUSION OF ENVIRONMENTALLY SOUND TECHNOLOGIES.....	9
1. <i>Transfer of technologies to TNC affiliates in developing countries</i>	9
2. <i>Diffusion of cleaner technologies in host countries</i>	10
3. <i>The issues</i>	11
4. <i>Key questions for consideration</i>	11
C. THE ROLE OF STAKEHOLDERS IN MAKING FDI WORK FOR SUSTAINABLE DEVELOPMENT.....	12
1. <i>Guidelines and codes of conduct for industry</i>	12
2. <i>National policies</i>	13
3. <i>Role of NGOs</i>	13
4. <i>Key questions for consideration</i>	14
III. FUTURE WORK.....	14
A. RECOMMENDATIONS AT THE INTERGOVERNMENTAL LEVEL.....	14
B. SUGGESTIONS FOR FURTHER WORK	14

I. BACKGROUND

A. Context

1. The pre-UNCTAD X Seminar on making foreign direct investment (FDI) work for sustainable development, to be held in Geneva on 15 November 1999, is one of a series of seminars¹ in preparation for UNCTAD X².

2. The debate regarding the relationship between FDI³ and sustainable development has focused on whether transnational corporations (TNCs⁴) are contributing positively to, or on the contrary undermining, the sustainable development of host developing countries. On the one hand, there is some evidence that TNCs have relocated polluting industries and transferred obsolete technologies to developing countries⁵. On the other hand, the case can also be made that TNCs have the potential to promote sustainable development by facilitating the transfer of environmentally sound technologies and efficient environmental management practices.

3. The rapid increase in FDI inflows in developing countries creates a new impetus to analyse the factors which encourage the positive contribution of FDI to sustainable development.⁶ To a large extent, such a contribution depends on the extent to which TNCs have devised environmental management policies, procedures and practices for their affiliates in developing countries. Another important issue is the extent to which environmentally sound technologies (ESTs) are transferred to TNC affiliates and diffused in host developing countries. Government policies, non-governmental organizations (NGOs) and voluntary industry guidelines and codes of conduct play an important role in promoting sounder environmental management practices and the

¹ Pre-UNCTAD X Seminar on the role of competition policy for development in globalizing world markets, 14-15 June 1999; pre-UNCTAD X Workshop on exchange of experiences among enterprises in the area of electronic commerce; and pre-UNCTAD X Expert Workshop on trade, sustainable development and gender, 12-13 July 1999.

² The UNCTAD Conference is the organization's highest policy-making body. It meets every four years at ministerial level to formulate major policy guidelines and decide on the UNCTAD mandate and future programme of work. The last Conference, UNCTAD IX, was held in Midrand, South Africa, in 1996, and preparations are now under way for UNCTAD X, which will take place in Bangkok, Thailand, in February 2000.

³ UNCTAD defines FDI as an investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy in an enterprise resident in an economy other than that of the foreign direct investor.

⁴ A transnational corporation is defined as a firm having productive activities in two or more countries.

⁵ Lyuba Zarsky (1999), *Havens, Halos and Spaghetti: Untangling the Evidence about Foreign Direct Investment and the Environment*, OECD Proceedings on foreign direct investment and the environment.

⁶ Between 1987 and 1992 FDI inflows to developing countries averaged US\$ 35 billion. In 1998, these flows totalled US\$ 165 billion.

transfer of ESTs to TNC affiliates. However, the contribution that FDI can make to sustainable development may remain relatively limited unless there is a diffusion of sound environmental management practices and pollution prevention technologies to local companies in developing countries, both to suppliers and to other companies. Government policies, public-private partnerships, cooperation between companies in a particular sector, and advocacy efforts by citizen groups can also play an essential role in promoting this diffusion.

4. This Seminar will provide an opportunity for TNC representatives to illustrate their approach to managing the environment at the company level and along the supply chain. Speakers will also present examples of the transfer of cleaner technologies and their diffusion in host countries to local companies. Industry partnerships and government initiatives which have facilitated improved environmental management and the transfer of ESTs will be illustrated as well.

5. In addition, representatives from government, industry, environment and development NGOs and other experts will present their perspective and experiences on these issues and exchange their views.

6. Finally, the Seminar will formulate recommendations for possible follow-up activities after UNCTAD X, at both the intergovernmental and secretariat levels. It will provide useful inputs to the deliberations on investment and sustainable development by the Commission on Sustainable Development (CSD) at its eighth session, in May 2000.⁷

B. Objectives

7. The main objectives of the Seminar are to:

- Identify best environmental practices and explore measures for promoting improved environmental practices among foreign investors;
- Identify ways and means to promote the transfer of clean technologies from TNCs to their affiliates and their diffusion in the host developing countries;
- Promote an exchange of experiences and views among Governments, industry and NGOs; and
- Formulate policy recommendations for consideration by the Preparatory Committee for UNCTAD X.

⁷ The UNCTAD secretariat is the United Nations system-wide task manager to prepare for the CSD deliberations on trade, investment and economic growth.

C. UNCTAD work

8. UNCTAD has been extensively studying the environmental practices of TNCs since the early 1990s. A 1993 publication⁸ on environmental management in TNCs examined environmental management practices in 169 of the world's largest TNCs and informed decision makers on the state of corporate environmental management. A 1996 report⁹ provided an analysis of guidelines set by world industry associations for their member firms. More recently, the environment chapter of the *World Investment Report 1999*¹⁰ examined the environmental impacts of FDI on developing countries and set out a number of policy implications.

9. In the context of this Seminar, the preliminary findings of two current UNCTAD projects on the environmental practices of TNCs in host developing countries will be presented. A project on cross-border environmental management practices in TNCs is currently being carried out by the Copenhagen Business School (CBS) in collaboration with UNCTAD's Division on Investment, Technology and Enterprise Development, with funding from the Danish International Development Agency. As a part of this project, which is entitled "Case studies of cross-border environmental management in TNCs", a series of case studies is being conducted on environmental practices of transnational corporations in China, India and Malaysia. The project also provides unique survey data on environmental management practices in 154 TNCs in these same host countries¹¹.

10. Parallel to the UNCTAD/CBS project, a project funded by the German Government explores measures for promoting sustainable development through foreign direct investment. The project will help determine whether the transfer and diffusion of clean technologies via TNCs may support the efforts of developing countries in achieving the objectives of multilateral environmental agreements. The Institute for Environmental Management and Business Administration at the European Business School in Oestrich Winkel, Germany, is conducting five company-level case studies in China, India and Malaysia.

⁸ UNCTAD (1993), *Environmental management in transnational corporations – Report on the Benchmark Corporate Environmental Survey*, United Nations, New York.

⁹ UNCTAD (1996), *Self-regulation of environmental management - An analysis of guidelines set by world industry associations for their member firms*, New York and Geneva. Sales No. E.96.II.A.5.

¹⁰ UNCTAD (1999), *World Investment Report 1999 – Foreign Direct Investment and the Challenge of Development*, United Nations, New York and Geneva.

¹¹ Preliminary reports on this study are available on the UNCTAD website (www.UNCTAD-10.org/welcome.html; see pre-Conference events).

II. SUBSTANTIVE ISSUES

11. Environmental management of TNCs in host developing countries and diffusion of cleaner technologies by TNCs are closely interlinked issues. However, in order to facilitate discussions during the Seminar, the first session will focus on environmental management practices within TNCs, including issues related to environmental supply chain management. The second session will concentrate on issues related to the transfer and diffusion of cleaner technologies to developing countries. The third session will look at the role of industry associations, Governments and NGOs and intergovernmental organizations as facilitators of improved environmental performance in TNCs.

A. Environmental management practices of TNCs

1. TNC environmental management

12. Environmental management is broadly understood to be the objectives, standards, procedures and practices that a company establishes to address environmental challenges.

13. A number of recommendations were made to business and industry on environmental management in Agenda 21, adopted in 1992 by the United Nations Conference on Environment and Development, of which the following are of particular relevance to TNCs. TNCs should:

- Recognize environmental management as among the highest corporate priorities and as a key determinant to sustainable development;
- Introduce policies and commitments to adopt equivalent or not less stringent standards of operation as in the country of origin (for the management of hazardous waste and toxic chemicals);
- Be encouraged to establish worldwide corporate policies on sustainable development;
- Establish environmental management systems, including environmental auditing of production or distribution sites; and
- Share their environmental management experiences with the local authorities, national Governments and international organizations.

14. In addition to these recommendations, a number of industry associations have in recent years developed guidelines, codes of conduct and standards which often apply to specific industries (chemical, pharmaceutical, etc). Some of these initiatives have been aimed at improving the environmental management and performance of TNCs¹².

¹² UNCTAD (1996), *Self-regulation of environmental management - An analysis of guidelines set by world industry associations for their member firms*, New York and Geneva.

15. Three dimensions of environmental management in TNCs that are of particular relevance to developing countries can be emphasized:

a) *Managing the environment across borders*

16. The concept of cross-border environmental management has been coined to describe the environmental management practices of headquarters that concern foreign affiliates. Five elements generally constitute a cross-border environmental management system: general principles, standards and objectives for international conduct; worldwide policies and programmes in specific areas of environmental concern; control and reporting procedures and methodologies for foreign operations; training and education activities; and an organizational set-up¹³. The way TNCs organize themselves across borders is pivotal to understanding their effects on developing host countries.

b) *Supply chain environmental management*

17. Another issue of importance is how TNCs manage the environment beyond the limits of their own company. The relationship of TNCs to their local suppliers and subcontractors with respect to the diffusion of environmental management practices will be an essential factor in helping developing countries to achieve sustainable development.

18. A number of procedures and practices are used by TNCs to manage the supply chain, such as questionnaires, on-site audits and screening. In some instances, TNCs also offer technical assistance to suppliers or subcontractors for the improvement of their environmental management practices.

c) *Environmental management systems and the ISO 14000 series*

19. Within the framework of the International Organization for Standardization (ISO), TNCs have played a role in the development of the ISO 14000 series of international environmental standards, including those relating to environmental management systems (EMS). The ISO 14001 standard provides a basis for certifying a firm's EMS which may promote greater credibility with overseas clients and the Government. A number of TNCs have obtained ISO 14001 certification.

20. The policies of TNCs, particularly in relation to affiliates and suppliers in developing countries, may influence the use of EMS and ISO 14001 in those countries. There is some evidence that ISO 14001 certification will become a supplier condition¹⁴. There is also some evidence of large companies and, in particular TNCs,

¹³ UNCTAD (1996), *Self-regulation of environmental management - An analysis of guidelines set by world industry associations for their member firms*, New York and Geneva, p. 27.

¹⁴ As of May 1997, a survey of manufacturers in Asia found that none intended to require ISO 14001 certification in the near future. See: "ISO 14001 in Asia: an ASER Survey", *Asia Environmental*

having some kind of “green” procurement policies. Anecdotal evidence suggests that several TNCs encourage their suppliers to seek ISO 14001 certification or to apply environmental management practices which are similar to those of the TNC.

21. A 1997 UNCTAD expert meeting concluded that pressures on developing country suppliers to demonstrate ISO 14001 certification could result in barriers to trade and/or detract from the environmental objectives of setting up an EMS. Companies in developed countries should establish supportive cooperation with their suppliers in developing countries in the area of EMS implementation, the experts concluded, adding that TNCs could play an important role in that regard¹⁵.

2. The issues

22. In a growing number of developing host countries environmental standards may be more or less equivalent to those of most TNC home countries. However, the lack of enforcement of environmental regulations in certain developing countries may provide an incentive for TNCs to take advantage of this situation and ease environmental standards and controls. On the other hand, companies may generally anticipate future international standards and the increasing stringency of standards in host developing countries and choose to implement state-of-the-art environmental systems.

23. In this situation, it is essential to understand, how TNC affiliates in developing countries manage environmental challenges, e.g. the extent to which they establish environmental management systems and have these systems certified according to an environmental management standard. It is also important to analyse whether and how TNCs facilitate the adoption of environmental management measures by local suppliers and subcontractors. In addition, it is essential to understand how the parent company manages the environment at foreign affiliates, e.g. the extent to which headquarters sets standards and requirements for the environmental performance of affiliates and establishes procedures for monitoring and upgrading the environmental performance of affiliates. Finally, it is important to understand the overall market, industry and regulatory parameters that will influence the environmental management practices of TNCs in developing host countries.

24. The content and state of environmental management practices in TNCs is being analysed by the two UNCTAD projects referred to above. These projects will help provide indications of the state of environmental management at TNC affiliates in the three Asian developing countries concerned and give examples of best environmental

Report, London, April 1977, pp. 9-11. Another survey in July 1997 of global United States-based firms concluded that businesses were not rushing to certify themselves, were not being asked to certify by their customers, and were not intending to make ISO 14001 certification a supplier condition. Riva Krut and Carol Drummond, *Global Environmental Management: Candid Views of Fortune 500 Companies*, Report of the USAID Asia Environmental Partnership, Washington, D.C. In: Riva Krut and Harris Gleckman, *ISO 14001, A missed opportunity for sustainable global industrial development*. Earthscan, 1998.

¹⁵ Expert Meeting on trade and investment impacts of environmental management standards, particularly the ISO 14000 series, on developing countries, Geneva, 29-31 October 1997.

management practices which may be used as benchmarks for other companies.

3. Key questions for consideration

25. Discussions could focus on the following issues:

- How widespread are EMS in host developing countries?
- Do TNCs generally comply with home country standards or host country standards?
- Have TNCs contributed to greening the supply chain?
- What are best practices in regard to environmental management at affiliates in developing countries?
- What are the particular challenges faced by small and medium-sized enterprises (SMEs) in implementing environmental management practices?
- What factors, actors, or forces drive the improvement of environmental management in TNCs?

B. Transfer and diffusion of environmentally sound technologies

1. Transfer of technologies to TNC affiliates in developing countries.

26. Agenda 21 defines the transfer of ESTs as follows: “Environmentally sound technologies are not just individual technologies, but total systems which include know-how, procedures, goods and services, and equipment, as well as organizational and managerial procedures. This implies that when discussing transfer of technologies, the human resource development and local capacity-building aspects of technology choices, including gender-relevant aspects, should also be addressed. Environmentally sound technologies should be compatible with nationally determined socio-economic, cultural and environmental priorities.”¹⁶

27. A NUMBER OF RECOMMENDATIONS FOR TNCs ARE ALSO INCLUDED IN AGENDA 21, SUCH AS THAT THEY SHOULD ARRANGE FOR ENVIRONMENTALLY SOUND TECHNOLOGIES TO BE AVAILABLE TO AFFILIATES IN DEVELOPING COUNTRIES¹⁷ AND SHOULD CONSIDER ESTABLISHING ENVIRONMENTAL PARTNERSHIP SCHEMES WITH SMES¹⁸.

¹⁶ Agenda 21, Chapter 34, p. 252.

¹⁷ Agenda 21, Chapter 30.22.

¹⁸ Agenda 21, Chapter 30.23.

28. Technological change may contribute to reducing environmental externalities linked to production in four main instances:¹⁹

Product changes:

- Reduction in the environmental degradation caused by the product itself;
- Manufacture of products which are less environmentally damaging to use or dispose of (e.g. fuel-efficient vehicles)

Production process modifications:

- Resources used or pollutants emitted less intensively

Input substitution:

- Inputs such as chlorofluorocarbons are replaced by inputs such as hydrochlorofluorocarbons

Improvement in operating and housekeeping processes:

- Technology-related improvements

29. When the transfer of ESTs has taken place, the question arises as to whether or not the technologies used are end-of-pipe technologies or process technologies. Shifting from a corrective to a preventive approach will encourage further technological innovation and the use of alternative cleaner technologies.

2. Diffusion of cleaner technologies in host countries

30. FDI can make a particularly important contribution to sustainable development through the diffusion of cleaner technologies to local companies in developing host countries. Whether or not such a contribution arises is an empirical question²⁰.

31. Spillover effects in host countries may take various forms, including the following:
21

- Imitation by local firms of the technological practices of TNCs;
- Employment by local firms of staff previously employed by a TNC having a staff training programme;
- Provision of technical assistance by the TNC affiliate to local suppliers to improve technological efficiency and respond to higher quality standards; and
- Existence of competitive pressures to take advantage of opportunities arising from eco-efficiency.

¹⁹ OECD (1995), *Technologies for Cleaner Production and Products*, Paris.

²⁰ *World Investment Report 1999*.

²¹ Nick Johnstone (1997), *Globalization, Technology and Environment*, OECD proceedings on Globalization and Environment – a Preliminary Perspective, p. 231.

3. The issues

32. FDI can also be a vehicle for the diffusion of environmentally sound technologies and environmentally sound management practices in developing countries. There is considerable potential for generating win-win scenarios if foreign investors transfer best environmental practices and technologies to enable developing countries to meet global environmental objectives.

33. However, empirical evidence on the environmental impact of TNCs in host developing countries is mixed, and there is a lack of evidence on the role of FDI in the transfer and diffusion of environmentally sound technologies in such countries²². There is evidence of TNCs transferring both ESTs and obsolete technologies to developing countries. Further research is thus needed to identify factors that contribute to the diffusion of cleaner technologies.

34. Appropriate policies in the host country, and responsible environmental behaviour of investors, should both be encouraged.

35. As mentioned earlier, the second session of the Seminar will present experiences with the transfer and diffusion of clean technologies to host developing countries. Different stakeholders, such as government, industry and NGOs, will be invited to present their perspectives and comment on this issue. The intention is to encourage a positive dialogue among the stakeholders and to learn from their respective experiences. Areas where further work is needed in order for the appropriate mechanisms to be encouraged for the diffusion of ESTs will also be identified.

4. Key questions for consideration

36. Discussions could focus on the following issues:

- Are TNCs transferring cleaner technologies and practices to host developing countries?
- Have TNCs focused on end-of-pipe approaches, or have they encouraged process modifications to achieve environmental objectives?
- Have innovative technologies been developed to respond to the particular needs of developing countries?
- Are domestic enterprises and suppliers benefiting from the transfer and diffusion of ESTs?
- What are critical success factors for an improved integration of environmental requirements in FDI?

²² *World Investment Report 1999.*

C. The role of stakeholders in making

FDI work for sustainable development

37. Over the years, a number of initiatives have been taken by Governments, industry and NGOs to promote improved environmental performance in TNCs and facilitate the transfer and diffusion of environmentally sounder technologies.

*1. Guidelines and codes of conduct for industry*²³

38. Such initiatives have been taken particularly since the adoption of Agenda 21, which contains non-binding recommendations for business and industry. Although non-binding, the adoption of Agenda 21 by 179 countries reflects international recognition of sustainable development as a common objective for nations around the world.

39. The OECD Guidelines for Multinational Enterprises, which were first drawn up in 1976, have included a chapter on environment since 1991. A review of the guidelines, including the environmental chapter, has been under way since June 1998.

40. The International Chamber of Commerce (ICC) Business Charter for Sustainable Development, endorsed by more than 2,000 companies, is said to be the best-known business statement on the environment and covers all sectors. Its 16 principles are meant to assist enterprises in developing their own environmental policies. The European Scientific Research Center (CERES) Principles, endorsed by 46 companies, address a number of issues related to environmental management and performance of companies.

41. At the international level, initiatives have also been taken by such multilateral financial institutions as the World Bank, which imposes certain environmental standards on the investment projects it considers for support and assesses the environmental impact of projects considered environmentally sensitive. The International Finance Corporation has adopted environmental and social safeguard policies as well, in July 1998.

42. The ISO has developed the ISO 14000 series of environmental standards, which apply to environmental management systems.

43. Initiatives have also been carried out by industry associations, such as the chemical industry's Responsible Care Programme, the Environmental Charter of the

²³ For further information please refer to Daniel Chudnovsky and André Lopez (1999), *Corporate environmental management in the international context*, and J. Adams. (1999), *Foreign direct investment and the environment: the role of voluntary corporate environmental management*, CCNM/EMEF/EPOC/CIME(98)4.

International Council on Metals and the Environment, and the Keidanren's²⁴ Global Environmental Charter.

2. National policies

44. At the national level, many home country Governments have developed investment promotion programmes and policies to support sustainable private sector initiatives in the area of international trade or foreign direct investment. The environmental standards set, the specific activities supported and the particular objective of each programme vary²⁵. However, the common thread seems to be the will to encourage sustainable development by supporting the private sector in activities relating more specifically to trade, investment or technical assistance²⁶.

45. Host countries are responsible for setting the appropriate domestic policies and regulations to attract sustainable FDI. Accordingly, at the Seminar government representatives will be encouraged to share their experiences with the development of appropriate national measures and the establishment of appropriate structures to attract sustainable investment. They will also be invited to share their countries' experience with the environmental practices of TNCs²⁷.

3. Role of NGOs

46. Over the years, environment and development NGOs have played a central role, both nationally and internationally, in raising awareness of environmental issues. In part, the growing NGO movement can be attributed to the failure of public institutions to address such issues. NGOs have also played a leading role in flagging the environmental aspects of FDI and have emphasized the need to consider such aspects²⁸. In both developed and developing countries, environmental legislation has evolved partly in response to pressures from the NGO community. Judicial activism by NGOs in some developing countries, such as India, has helped make industries more aware of environmental concerns and persuaded affiliates of TNCs to improve

²⁴ A Japanese industry association.

²⁵ Riva Krut and Ashley Morets (1999) *Home country measures for encouraging sustainable FDI*.

²⁶ Home country measures to promote environmentally sounder FDI are presented in two context papers under the UNCTAD/CBS project: Janne Eriksen and Michael Hansen (1999), *Environmental aspects of Danish direct investment in developing countries. Managing the environment in an open economy*, Occasional paper, Cross-border environmental management project, CPH: Copenhagen Business School. The German context paper will be available shortly.

²⁷ Various host country measures to address FDI-related environmental challenges are examined in three context reports produced in 1999 in connection with the UNCTAD/ CBS project: Rasiah Rajah, *Transnational corporations and the environment: The case of Malaysia*, Occasional paper no. 4, Cross-border environmental management project, CPH: Copenhagen Business School; Veena Jha, *Investment liberalization and environmental protection: Conflicts and compatibilities in the case of India*, Occasional paper no. 1, Cross-border environmental management project, CPH: Copenhagen Business School; and Guoming et al., *Cross-border environmental management and transnational corporations: The case of China*, Copenhagen: UNCTAD/CBS Occasional paper no. 3.

²⁸ In the OECD context, the role of NGOs became prominent in the context of the negotiations on a multilateral agreement on investment.

environmental practices²⁹.

4. Key questions for consideration

47. Discussions could focus on the following issues:

- What measures, mechanisms and incentives at the national and international level are needed to improve environmental management in TNCs and to encourage access to and diffusion of ESTs?
- Are NGOs key players in promoting improved environmental practices?

III. FUTURE WORK

48. The Seminar will offer suggestions on how UNCTAD X could strengthen the positive linkages between trade, investment and the environment at the national and, in particular, intergovernmental and secretariat levels, building on ongoing work programmes in UNCTAD's Division on Investment, Technology and Enterprise Development and Division on International Trade in Goods and Commodities.

49. In addition, the Seminar could make suggestions on how the unique approach of bringing together government representatives and civil society -- both the business community and environment and development NGOs -- can be usefully replicated in future UNCTAD activities.

A. Recommendations at the intergovernmental level

50. The Seminar may provide suggestions for activities that could be included in UNCTAD's work following UNCTAD X. Such activities could also be useful in the context of the substantive 10-year review by the General Assembly of implementation of Agenda 21 (Rio+10) in the year 2002.

B. Suggestions for further work

51. The Seminar may also make suggestions for activities to be carried out at the secretariat level, including in the context of technical cooperation activities. This may include such issues as:

- The role of multi-stakeholder approaches in promoting sustainable development;
- Identification of company best practices and dissemination of this information;

²⁹ Pranay Lal and Veena Jha (1999), *Greening TNCs through Judicial Activism*.

- Examination of transparency and reporting practices by TNCs;
- Consolidation of information available on initiatives taken by national Governments and international organizations to promote sustainable FDI;
- Case studies in such geographical regions as Latin America and Africa; and
- Sectoral studies on technology transfer and diffusion.