

Hands-on and interactive workshop led by  
Mathis Wackernagel, Executive Director, and Steve Goldfinger, Research and Standards Director of  
Global Footprint Network.

## ECOLOGICAL FOOTPRINT

**a science-based methodology for benchmarking environmental performance and  
monitoring progress toward a sustainable future.**

Date & Time : Wednesday, 24 November 04, 09:00 to 17:00, registration starts at 08:45  
Venue : Auditorium, G/F, Jockey Club Environmental Bldg, 77 Tat Chee Ave, Kln, HK  
Instructors : The seminar will be led by Mathis Wackernagel, Executive Director, and Steve Goldfinger,  
Research and Standards Director of Global Footprint Network.  
Medium : English

The Ecological Footprint is a natural resource accounting tool that was developed in the early 1990s by Mathis Wackernagel and Bill Rees at the University of British Columbia. Today it has become one of the most commonly used methods worldwide for benchmarking environmental performance and monitoring progress toward a sustainable future. This workshop will discuss the basic principles and concepts of the method and help participants understand how to apply them in their own business and organization.

Specific outcomes of the workshop for participants include:

1. Understand what the Ecological Footprint is and how it is measured.
2. Determine the value of the Footprint for their business or organization.
3. Understand how the Ecological Footprint relates to and supports other management tools and frameworks such as Environmental Management Systems (EMS), Life Cycle Analysis, The Natural Step and Eco-efficiency.
4. Distinguish between business or community responsibility versus influence, and how to apply this distinction using the Ecological Footprint and communicating results.
5. Understand how the Ecological Footprint can help with long-term strategic planning

Organized by:



Supporting Organization:



## **ENROLMENT FORM**

Enquiry: 24837178 Fax: 24831877

### **ECOLOGICAL FOOTPRINT**

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Please send the enrolment form with FULL PAYMENT by cheque to the KFBG 5 days before the course commences. Please send the completed form together with a cheque made payable to "Kadoorie Farm and Botanic Garden Corporation" to the China Programme, KFBG at Lam Kam Road, Tai Po, N.T.

Mr/Ms/Mrs \_\_\_\_\_ Position \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

Tel \_\_\_\_\_ Fax \_\_\_\_\_ E-mail \_\_\_\_\_

#### **FEE:**

- Non BEC Member - HK\$400
- Registration in group of 2 or more - HK\$360
- BEC Member - HK\$320
- Enroll and pay before 15 November 2004 - HK\$360

Course fee includes course manual, certificate & refreshments

#### **Remark:**

- If the course is cancelled, applicants will be informed 3 working days before the course commences. Otherwise, no confirmation will be made.
- Classes will be rescheduled to a future date when typhoon signal no. 8 or above, or black rain storm warning is still hoisted 3 hours before course commences; and

Withdrawal of applications have to reach us at least 3 working days before the course commencement date.

An administration fee of HK\$200 per applicant will be deducted from the course refund. Refunds will not be given after the aforesaid deadline. Alternatively, the applicant may nominate a substitute to attend the course.

Nomination applications have to be submitted to us 3 working days before course commences.

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[www.kfbg.org](http://www.kfbg.org)

## PROGRAMME INTRODUCTION

# ECOLOGICAL FOOTPRINT

**a science-based methodology for benchmarking environmental performance and monitoring progress toward a sustainable future.**

### Introduction

Governments, organizations and communities have long understood the importance of balancing fiscal assets against expenditures, but are just beginning to recognize the value of using natural resources within the limits of the Earth's productivity. To operate sustainably, these resources must be used at a rate no faster than they can be regenerated by nature. But how much nature do we use, and how much do we have? The Ecological Footprint is a science-based methodology that addresses this question by comparing the ecosystem services used each year by humanity with the biosphere's annual regenerative capacity for these services. A Footprint can be calculated at any scale—from global, national or municipal to that of organizations, products or services.

The Footprint is measured in global-acres, units of biologically productive area necessary to produce the annual flow of resources that are consumed. Translating different types of resource use into a single common metric makes it easy to benchmark the overall ecological demand associated with any human activity, from a single project to the operation of an entire organization or community. At the same time, Footprint components can be analyzed to determine their relative contribution to the overall demand, and targeted strategies developed to maximize Footprint savings.

This workshop will discuss the basic principles and concepts of the method and help participants understand how to apply them in their own organization.

### Instructors

Mathis Wackernagel, Ph.D. Executive Director, Global Footprint Network

Mathis is co-creator of the Ecological Footprint and a recognized international authority on sustainability. He has worked on sustainability issues for organizations in Europe, Latin America, North America and Australia, and has lectured for community groups, government agencies, NGOs, and academic audiences at more than 100 universities on 5 continents. Mathis previously served as the director of the Sustainability Program at Redefining Progress in Oakland, CA. He has authored or contributed to over two dozen academic articles and co-authored various books on sustainability, including *Our Ecological Footprint: Reducing Human Impact on the Earth* and *Sharing Nature's Interest*. After earning a degree in mechanical engineering from the Swiss Federal Institute of Technology, he completed his Ph.D. in community and regional planning at the University of British Columbia in Vancouver, Canada.

Steven Goldfinger, Ph.D., Research and Standards Director, Global Footprint Network

Steve is an environmental educator who has worked with corporate, municipal and academic clients. He helped establish The Natural Step US, an environmental non-profit which promotes a scientific framework for understanding sustainability. Steve served as TNS' Director of Administration and Director of Education, and co-authored the U.S. workshop curriculum. He also worked with Second Nature, a non-profit promoting environmental literacy and the greening of operations in higher education, where he helped create a set of recommendations to the President's Council on Sustainable Development on the incorporation of sustainability principles and practices in higher education.

### Reference

Mathis Wackernagel and William E. Rees, *Our Ecological Footprint: Reducing Human Impact on the Earth*. New Society Publishers, Gabriola Island. 1996.

Chambers, Nicky, Simmons, Craig and Wackernagel, Mathis. *Sharing Nature's Interest: Ecological Footprints as an Indicator of Sustainability*. Earthscan Publications, London, 2000.

World-Wide Fund for Nature International (WWF), Global Footprint Network, UNEP World Conservation Monitoring Centre, 2004, *Living Planet Report 2004*, WWF, Gland, Switzerland. ([www.panda.org/livingplanet](http://www.panda.org/livingplanet))

Mathis Wackernagel, Niels B. Schulz, Diana Deumling, Alejandro Callejas Linares, Martin Jenkins, Valerie Kapos, Chad Monfreda, Jonathan Loh, Norman Myers, Richard Norgaard, & Jørgen Randers, "Tracking the ecological overshoot of the human economy," *Proc. Natl. Acad. Sci. USA*, Vol. 99, Issue 14, 9266-9271, July 9, 2002.

## PROGRAMME RUNDOWN

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8:45 Registration

9:00 Introductions

What is the Ecological Footprint? Key concepts and principles

How is the Footprint measured?

10:00-10:25 Discussion Session: Are sustainability indicators useful?

10:30-10:45 Tea Break

10:45-11:30 Calculating an organization or community Footprint

- Constructing a land use/human activity matrix
- Setting boundaries: Influence (Footprint savings) vs. Responsibility

11:30-12:00 Exercise: Set boundaries and create a simplified matrix for your organization or community

12:00-12:30 Case study of a Footprint application:

- How was it used, what were the benefits?
- Relationship to other management tools (EMS, TNS, LCA; eco-efficiency)

12:30-1:30 Lunch: networking time

1:30-2:15 Using the Ecological Footprint as a communication tool

2:15-2:45 Exercise: Develop a communication strategy that uses the Footprint to promote an environmental program or convey an environmental goal

2:45-3:00 Present and critique communication strategies in class discussion

3:00-3:15 Tea Break

3:15-3:45 Keys to success: using the Footprint successfully in your organizational or community

- Creating metrics
- Setting priorities and selecting among options
- Monitoring progress

3:45-4:15 Action planning: Developing a plan to utilize Ecological Footprint in your organization or community

- What opportunities do you see for using the Footprint in your organization or community?
- What barriers, problems and thorny issues does the Footprint raise?
- How would you overcome these barriers?
- Group discussion of participants' Ecological Footprint plans

4:15-4:45 Next steps and additional resources

- Global Footprint Network standards for Footprint applications
- Sources of support for Footprint applications

4:45-5:00 Wrap-up

Ecological Footprint and Biocapacity. The world's ability to regenerate resources and absorb waste in a limited time period. EUROPEAN COMMISSION. THEME Environment and energy. Authors: Florian Schaefer, Ute Luksch, Nancy Steinbach, Julio Cabeza, Jörg Hanauer The content of this paper does not necessarily reflect the official opinion of the European Commission. Europe Direct is a service to help you find answers to your questions about the European Union Freephone number (\*): 00 800 6 7 8 9 10 11. Ecological footprint is a method of gauging humans' dependence on natural resources by calculating how much of the environment is needed to sustain a particular lifestyle. In other words, it measures the demand vs. the supply of nature. The ecological footprint is one way of measuring sustainability, which refers to the ability of a population to support itself in the present without compromising that ability for the future.