

# SPRING SCHOOL

## HOW TO DESIGN SOLUTIONS FOR SOLID WASTE MANAGEMENT

A METHOD AND TOOLS FOR  
LOW AND MIDDLE-INCOME COUNTRIES

21- 26 May 2018  
Bologna - ITALY

### WHY THE SPRING SCHOOL

Solid Waste Management (SWM) is a complicated problem and in low and middle-income countries it cannot be solved by simply adopting solutions that worked in high income, highly industrialized countries.

So, how can policy-makers and practitioners begin to set in place a long-lasting solution? First of all, the solution must be carefully designed, avoiding the sense of emergency to dominate policy actions. The goal is to produce SWM PLANNING DOCUMENTS that can guide policy actions for several years.

Participants to this Spring School will be provided with a SWM design method and will familiarize with tools necessary to:

- build a comprehensive vision of the existing, non-effective reality;
- define critical elements and waste treatment bottle-necks;
- formulate alternative solutions and compare them in terms of social and environmental impacts, cost and financial sustainability;
- approve a SWM National Strategy or City Plan that provides a practical action path.

### WHO IS THIS SCHOOL FOR

The Spring School is directed to actors of the waste network operating in low and middle-income Countries, in particular:

- > Policymakers
- > National and City administrators and technical personnel
- > Technical personnel from Environment and Health Agencies
- > SWM planners and designers: engineers; environmental scientists; chemist; geologist; urban planners
- > Ph. D. students and Post-graduate researchers.

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21 - 26 may 2018  
Bologna, Italy

## TEACHING AND SITE VISITS PROGRAM

### BEFORE THE SPRING SCHOOL

Each registered participant will be requested to FILL UP A SPECIFICALLY DEVELOPED SWM **CHECKLIST** provided in advance by the scientific organizer. Filled up CHECKLISTS will be used to prepare a discussion on a few selected 'case studies'.

MONDAY, MAY 21ST 2018

9:00 - 13:00

The principles of SWM planning in situations where the current system is ineffective. The Integrated Sustainable WM approach. Definitions relevant for legislation: types and origin of waste; the EU waste catalogue; SWM activities and operations.

LUNCH

14:30 - 17:30

The technical and organizational elements of an Integrated SWM system. The legal and institutional framework necessary to an effective and efficient SWM. How to describe a SWM system: the WASTE FLOW ANALYSIS. LECTURE

TUESDAY, MAY 22ND 2018

9:00 - 13:00

Illustration of the structured design method and of the practical tools to be used in writing a SWM National Strategy or City Action Plan. Discussion of the CHECKLIST previously filled up by participants. How to describe a SWM system: the WASTE FLOW ANALYSIS.

LUNCH

14:30 - 17:30

The importance of segregated collection. Examples of segregated collection's organisation. The chain for the recovery of materials from municipal and industrial waste. The economics of material recovery.

WEDNESDAY, MAY 23RD 2018

9:00 - 13:00

The collection, treatment and recovery of the organic fraction from municipal waste. The development of an Industrial Sector from a 20 years perspective - the Italian composting and Biogas Association Case studies optimizing separate collection of organic waste.

Cost Analysis from high income countries

LUNCH

14:30 - 17:30

**SITE VISIT to plant for the sorting of waste dry fractions from segregated collection.**

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THURSDAY, MAY 24TH 2018

9:00 - 13:00

The application of the WASTE FLOW ANALYSIS approach to improve ineffective SWM systems. The Life Cycle Assessment of alternative WM scenarios to define environmental impacts and support WM planning.

Application of the WASTE FLOW ANALYSIS to design the evolution of an ineffective SWM system. Examples could be derived from participant's country if sufficient data were provided with the entrance Checklist.

ANALYSIS OF CASE STUDIES (if available)

LUNCH

14:30 - 17:30

The actors of an integrated SWM system. How to build an inclusive decision making process.

FRIDAY, MAY 25TH 2018

9:00 - 13:00

The economics of SWM: costs-revenues accounting. How to keep a city budget for SWM. How to conduct a SWM financial analysis. How to implement taxes or tariffs to citizens and industries. LECTURE

LUNCH

14:30 - 17:30

Review of CHECKLIST to assess how participation to the Spring School has provided understanding of SWM design.

**SATURDAY, MAY 26TH 2018**

**9:00 - 13:00 Sanitary landfill. SITE VISIT**

LUNCH

A CERTIFICATE of ATTENDANCE will be provided by ISWA

**SCIENTIFIC COORDINATION: DR. SIMONETTA TUNESI**

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## SPEAKERS

**Simonetta Tunesi** has over 25 years of experience in WM planning and contaminated sites remediation. She has written and thought extensively at university and professional level.

**Jeremy Gorelick** has a global expertise on Urban Infrastructure Financing. He is Senior Infrastructure Finance Advisor for USAID's WASH-FIN program and teaches at Johns Hopkins University.

**Marco Ricci**, with a broad international experience, is Chair of the ISWA Working Group on Biological Treatment of Waste and a Senior Expert at CIC - Italian Composting and Biogas Association.

**Mario Sunseri** has over 20 years experience in environmental engineering of sanitary landfills with effective energy recovery and in designing collections services. He also has a broad expertise on service tariffs.

## REGISTRATION COST

Deadline for registration is 15 April 2018

Registration Fee Non-Members = € 950 + VAT (22%) € 209 = € 1,159

Registration Fee Student = € 650 + VAT (22%) € 143 = € 793

Registration Fee ISWA Members = € 760 + VAT (22%) € 167,2 = € 927,2

The fee includes lecture materials, lunches, coffee breaks, and transport to site visits.

In case of cancellation of the Summer School due to unforeseeable events, The organizers will refund the registration fee but no other costs incurred prior to cancellation.

## FOR REGISTRATION PLEASE REFER TO

Letizia Parolini: [swmspringschool@gmail.com](mailto:swmspringschool@gmail.com)

## FOR QUESTIONS RELATED TO THE CONTENTS

of the Spring School please contact Simonetta Tunesi at [simonetta.tunesi@gmail.com](mailto:simonetta.tunesi@gmail.com)