

SPRING SCHOOL

HOW TO DESIGN SOLUTIONS FOR SOLID WASTE MANAGEMENT

**A METHOD AND TOOLS FOR
LOW AND MIDDLE-INCOME COUNTRIES**

**13 - 18 May 2019
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.

Organized by



Promoted by



SPRING SCHOOL

13 - 18 may 2019
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 13TH 2019

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

Work-groups discussion of the CHECKLIST previously filled up by participants.

The technical and organizational elements of an Integrated SWM system.

TUESDAY, MAY 14TH 2019

9:00 - 13:00

The legal and institutional framework necessary to an effective and efficient SWM.

Illustration of the structured design method and of the practical tools to be used in writing a SWM National Strategy or City Action Plan.

How to describe a SWM system: the WASTE FLOW ANALYSIS.

LUNCH

14:30 - 17:30

The chain for the recovery of materials from municipal and industrial waste.

The importance of segregated collection.

The criteria to develop full collection coverage and to activate the segregated collection of selected fractions.

WEDNESDAY, MAY 15TH 2019

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.

SPRING SCHOOL

13 - 18 may 2019
Bologna, Italy

LUNCH

14:30 - 17:30

Visit to a plant for the sorting of waste dry fractions from segregated collection.

THURSDAY, MAY 16TH 2019

9:00 - 13:00

Description of the WASTE FLOWS of the current situation of 'case studies' submitted by participants.

LUNCH

14:30 - 17:30

The economics of SWM: criteria of costs-revenues accounting to keep a city budget for SWM.

SWM private sector strategies: decision drivers to invest in projects.

Bankability and affordability in SWM : definition and drivers for improvement for cities.

Analysis of cost and revenue flows for various Waste treatment technologies (LF, WtE, AD, Pyrolysis...) = impact on contractual risks, notion of interface and risk allocation.

Contractual models for SWM: Management contract, O&M, DB, DBO, DBFO....

FRIDAY, MAY 17TH 2019

9:00 - 13:00

The actors of an integrated SWM system.

How to build an inclusive decision making process.

Strategies for dealing with the challenges of community engagement.

LUNCH

14:30 - 17:30

Review of CHECKLIST and WASTE FLOW ANALYSIS CASES to assess how participation to the

Spring School has provided understanding of SWM design.

SATURDAY, MAY 18TH 2019

9:00 - 13:00

Anaerobic digestion plant: treating organic waste from segregated collection.

LUNCH

A CERTIFICATE of ATTENDANCE will be provided by ISWA

SCIENTIFIC COORDINATION: DR. SIMONETTA TUNESI

SPRING SCHOOL

13 - 18 may 2019
Bologna, Italy

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.

Domenico Scamardella is an engineer with twenty years experience in the field of planning and management of environmental services, specific competence on the management of the integrated waste cycle.

Angelo Fazio is an architect with over 25 years experience in planning and design environmental services, international training consultancy on the waste cycle management in urban areas.

Samir Dendoune has an extensive experience in defining waste treatment projects for the private sector in developing countries. He travelled to many dump sites to understand the local specificities of such projects and to develop new business models that are affordable for the municipalities while bringing the necessary guarantees to secure private sector investment in developing countries.

Simonetta Simoni is a Sociologist with over 25 years of expertise in facilitating conflict resolution in private and public organisations. Her intervention as a mediator is aimed at empowerment of individual and group skills in community consensus building using different methods, like Open Space Technology and Appreciative Inquiry.

REGISTRATION COST

Deadline for registration is 7 April 2019

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

FOR QUESTIONS RELATED TO THE CONTENTS

of the Spring School please contact **Simonetta Tunesi** at simonetta.tunesi@gmail.com