# **TERMES OF REFERENCES Symposium sur : « Sciences for Sustainable Development» 3rd Edition**

# Background and rationale

The École Polytechnique de Thiès is organizing a symposium on "Science for Sustainable Development" from January 19 to 20, 2024. The symposium aims to bring together participants from the socio-professional world and the scientific and academic community to exchange views on how science can contribute to addressing today's economic, social, and environmental challenges. The event is part of the agenda of scientific activities annually organized in École Polytechnique de Thiès (EPT). In addition to discussions and presentations, Ph.D and master's students will also have the opportunity to showcase their research work and innovations through posters and exhibition stands. This symposium is particularly relevant to Africa and sub-Saharan Africa, as the region is experiencing a technological innovation boom and is in need of sustainable development solutions.

# Objectives

The main aim of this symposium is to create a relevant framework for dialogue between those involved in scientific research and those from the socio-professional and decision-making worlds.

# Specific objectives

# Specifically, this will involve:

1. Present academic research on sustainable development issues.

2. Discuss the new challenges of sustainable development through inclusive panels.

3. Give doctoral students and engineering students the opportunity to present research work and/or innovations.

4. Give project coordinators the opportunity to disseminate the results of their studies or organize training sessions through workshops.

5. To forge partnerships with the academic and socio-economic world in the field of research and development.

# Expected results

After the symposium, the following results are expected:

1. Academic researches on sustainable development themes are presented;

2. New sustainable development challenges are discussed through inclusive panels;

3. research work and/or innovations from Master and PhD students are presented;

4. Partnerships with the socio-economic world in the field of research and development are sealed.

# Format of the symposium

The symposium will be structured into plenary sessions, oral and poster sessions and side event (workshops). The presenters are:

* researchers who have expressed an interest in presenting their work, or who have been selected by the organizing committee;
* heads of institutions or regions invited to present their experiences.

The presentation will be both in person and online.

In terms of side events, we will have two workshops linked to two projects conducted in Ecole Polytechnique de Thiès (SCARE project and Open burning project). The SCARE one will be an experience-sharing workshop, and focus on on-site sanitation technologies and management in Senegal. This session will bring together scare project team and key public and private stakeholders. They will share their experiences and lessons learnt, also discussing ways for advancing construction and management of on-site sanitation systems. The workshop will be an opportunity to share information from the scare project, but also to gather information from utilities, regulators, academia, practitioner, public and private services which can serve as supplementary data to the project. The other workshop will be a project kick of ceremony.

# Participants

The symposium will bring together nearly four hundred (400) participants from Senegal, and abroad, including development partners. The audience will be mainly composed of teachers-researchers, students, managers from public administrations, the private sector and civil society.

# Themes

The symposium, which will take place on January 19 to 20, 2024, will cover two panels. The first panel will discuss the economic, environmental, and security issues related to oil exploitation in Senegal. The second panel will focus on sanitation and climate change in developing countries.

The symposium will feature research-innovation work presented as oral presentations and posters. These presentations will be organized into thematic sessions led by experts, with the possibility of them being presented either in person or via webinars. Two thematic sessions are proposed, with the first session focusing on energy topics such as fossil fuels, renewable energies, petrochemicals, energy efficiency, energy transition, and climate change. The second session will cover water sanitation and climate change, including topics like water, sanitation, climate risks, urban engineering, hydrology, hydrogeology, and climate change etc. Each speaker will have 15 minutes to present their work, followed by a 5-minute question and answer session.