



**SWS**

Innovation  
in underground solutions

A wide-angle, low-light photograph of a massive tunnel under construction. The tunnel's interior is lined with dark, curved concrete segments, creating a strong sense of perspective. Two small figures of people stand in the center of the tunnel, looking towards the exit. In the background, a small white building and a series of concrete structures are visible, leading out to a mountainous landscape under a cloudy sky.

**SWS**

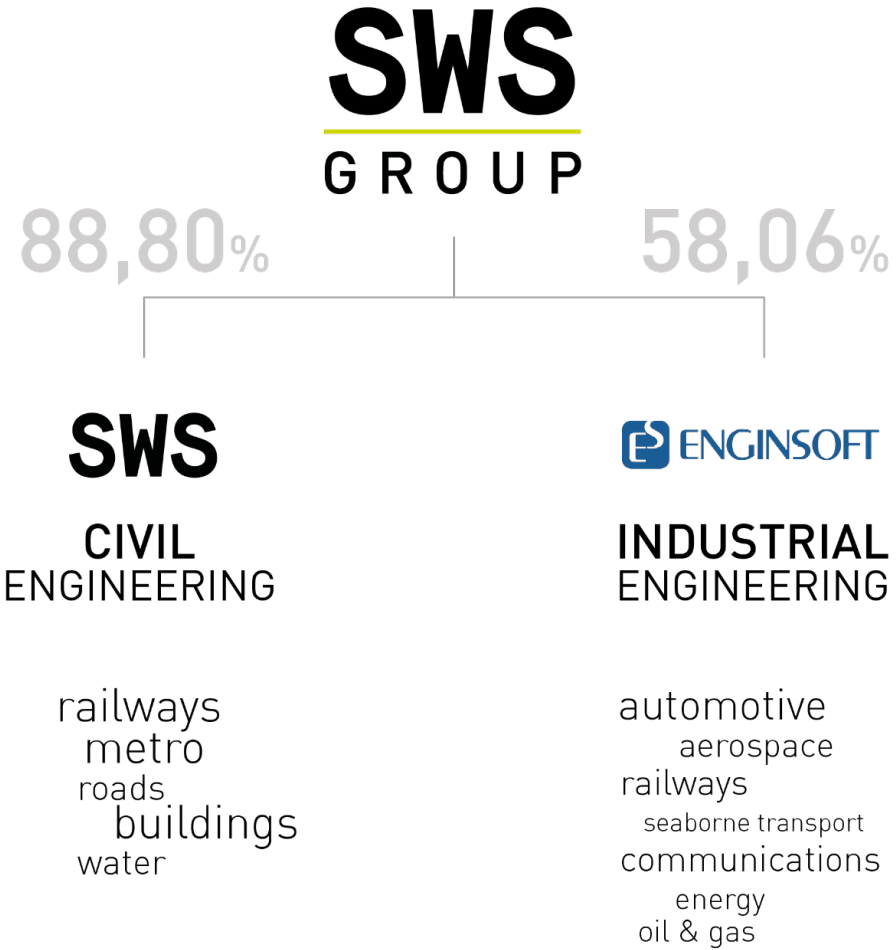
# About SWS

# COMPANY Overview

SWS Group is the holding company of **SWS Engineering** and **Enginsoft**



**40**  
years of  
experience



**4000+**  
projects



**50+M€**  
annual revenues



# ABOUT SWS Engineering

SWS is an **independent design firm** working across every aspect of responsible and sustainable design of **modern infrastructural projects**.



# 1000+

projects  
since 1982

Our strong commitment in **providing valuable, reliable and innovative solutions** represents a distinctive characteristic of the company since its foundation, in **1982**.



# 05

patents & copyrights



# 03

trade marks

# SWS

[www.swsglobal.com](http://www.swsglobal.com)



# SWS ENGINEERING

## Key Markets

SWS Engineering S.p.A.



1300+km  
of railways



650+km  
of metro



1900+km  
of roads



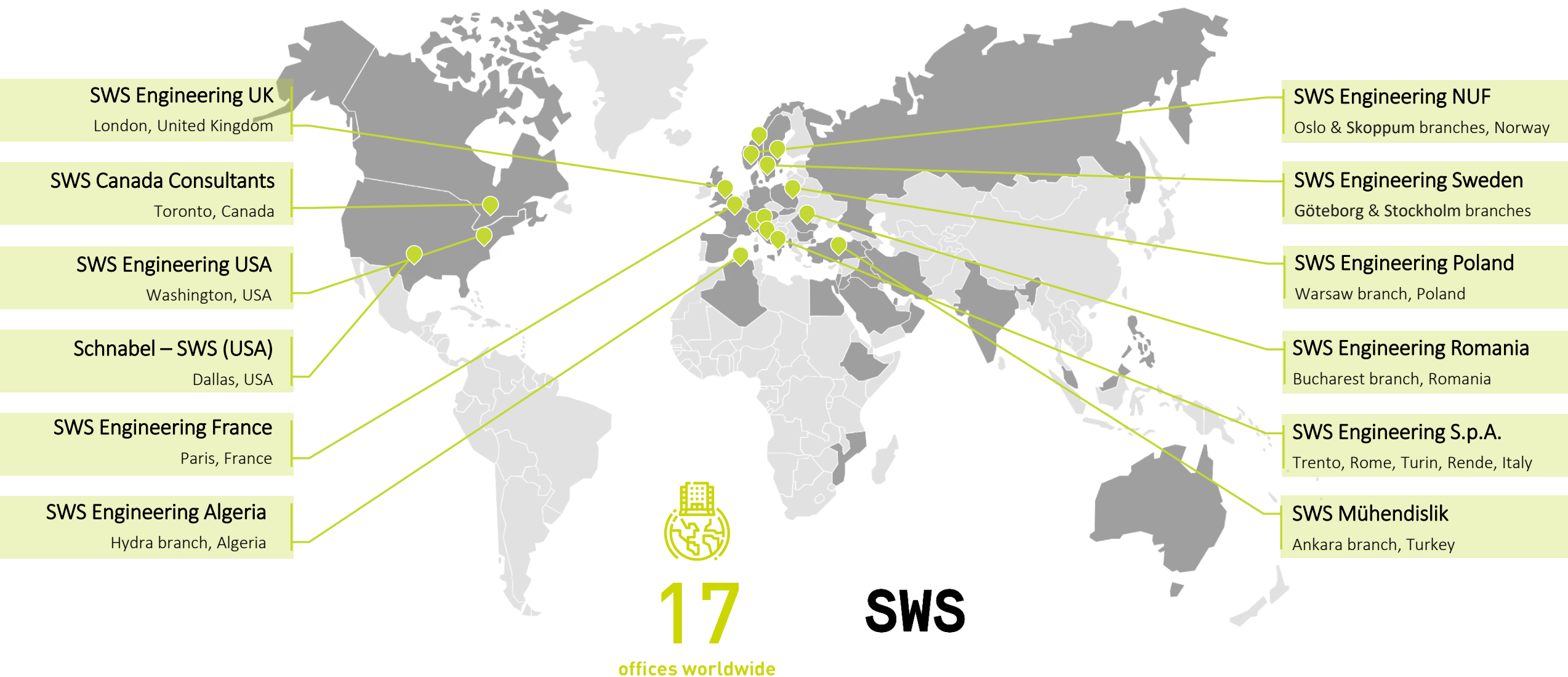
16mln m<sup>3</sup>  
of buildings



5300+MW  
of hydro energy



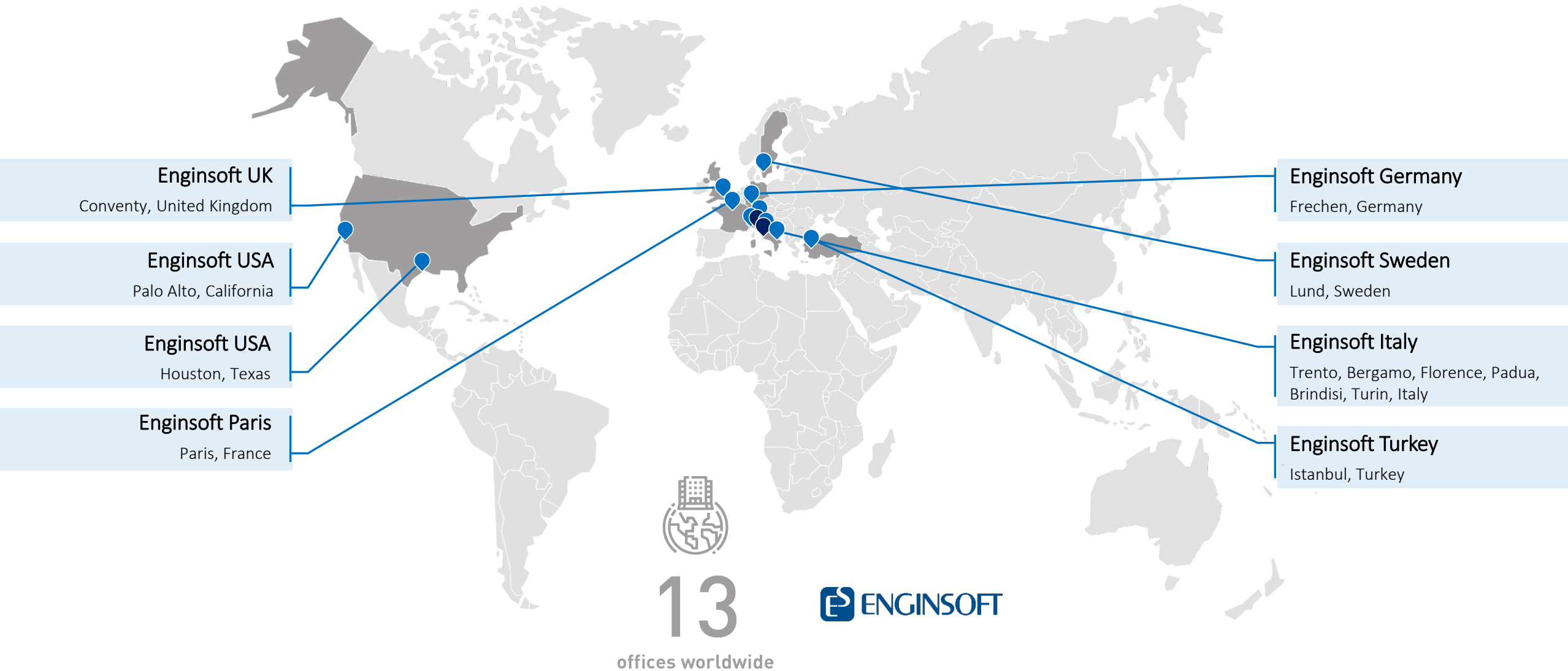
# International presence



# ENGINSOFT

## International presence

SWS Engineering S.p.A.





# OUR Services

SWS Engineering S.p.A.



## Design Services

Feasibility Studies  
Concept Design  
Preliminary Design  
Detailed Design  
Architecture & Landscape Design



## MEP Design

Complete Safety System Design  
Ventilation and Fire Safety  
CFD Simulation  
Definition of Ventilation Strategies  
Commissioning Support



## Project Management

Project Planning  
Project Monitoring  
Project Risk Assessment



## Value Engineering

Project Optimisation  
Implementation of New Technologies  
Advanced FE Simulation



## BIM Modelling

Civil Works  
Roads & Terrain  
Finishes and MEPs



## Construction Management

Construction Planning  
Construction Monitoring  
Construction Risk Assessment  
Construction Design



## Tender Assistance

Communication Strategy  
Professional Graphic Support  
Schematics and Renders  
Illustrative Videos



## Independent Check

Code Compliance  
Technical Content  
Project Buildability



# OUR Expertise

SWS Engineering S.p.A.



## 30+

BIM infra projects



### Tunnel Tech

Refers to the most advanced technologies and methodologies to design, build and maintain tunnels in any geo and anthropic environment. The key advantages offered by Tunnel Tech Suite are **cost and schedule control, reliable solutions to any design, construction engineering of underground space.**



### Digital Project

Refers to the most advanced technologies and methodologies to design, build and maintain tunnels in any geo and anthropic environment. The key advantages offered by Tunnel Tech Suite are **cost and schedule control, reliable solutions to any design, construction engineering of underground space.**



### SSS.infra

SSS.infra is a rigorous design Guideline developed and **patented by SWS** for the quantitative **multicriteria performance assessment** of sustainable infrastructure and for the retrofitting of the existing transportation network.



### i.BIM

i.BIM represents the way SWS goes beyond the current limits of Building Information Modelling, providing **customized workflows and post-processing tools** aimed at making infrastructure projects more reliable, productive and profitable.

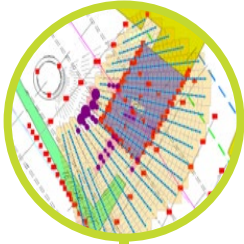
# MAJOR Innovation

SWS Engineering S.p.A.

Fibre Optic Brag Grating,  
FBG Monitoring System

Expanded Clay for  
Backfilling

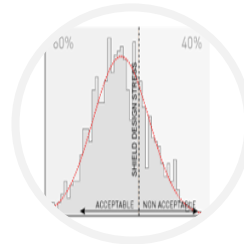
2011



Smart Cross Passage  
Patent

Smart Tunneling  
Project

2013



SSS.infra  
Guidelines for Sustainable  
Infrastructure Design

2017



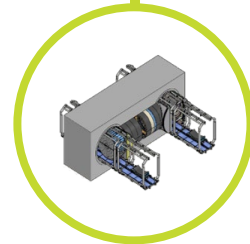
Transportation  
facility  
of loads and people

2019

2013

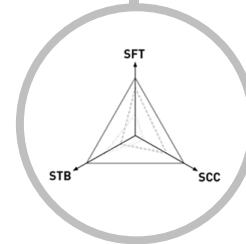
Fibre Optic Brag Grating,  
FBG Monitoring System

Expanded Clay for  
Backfilling



2016

Digital Project database  
and Project Tools



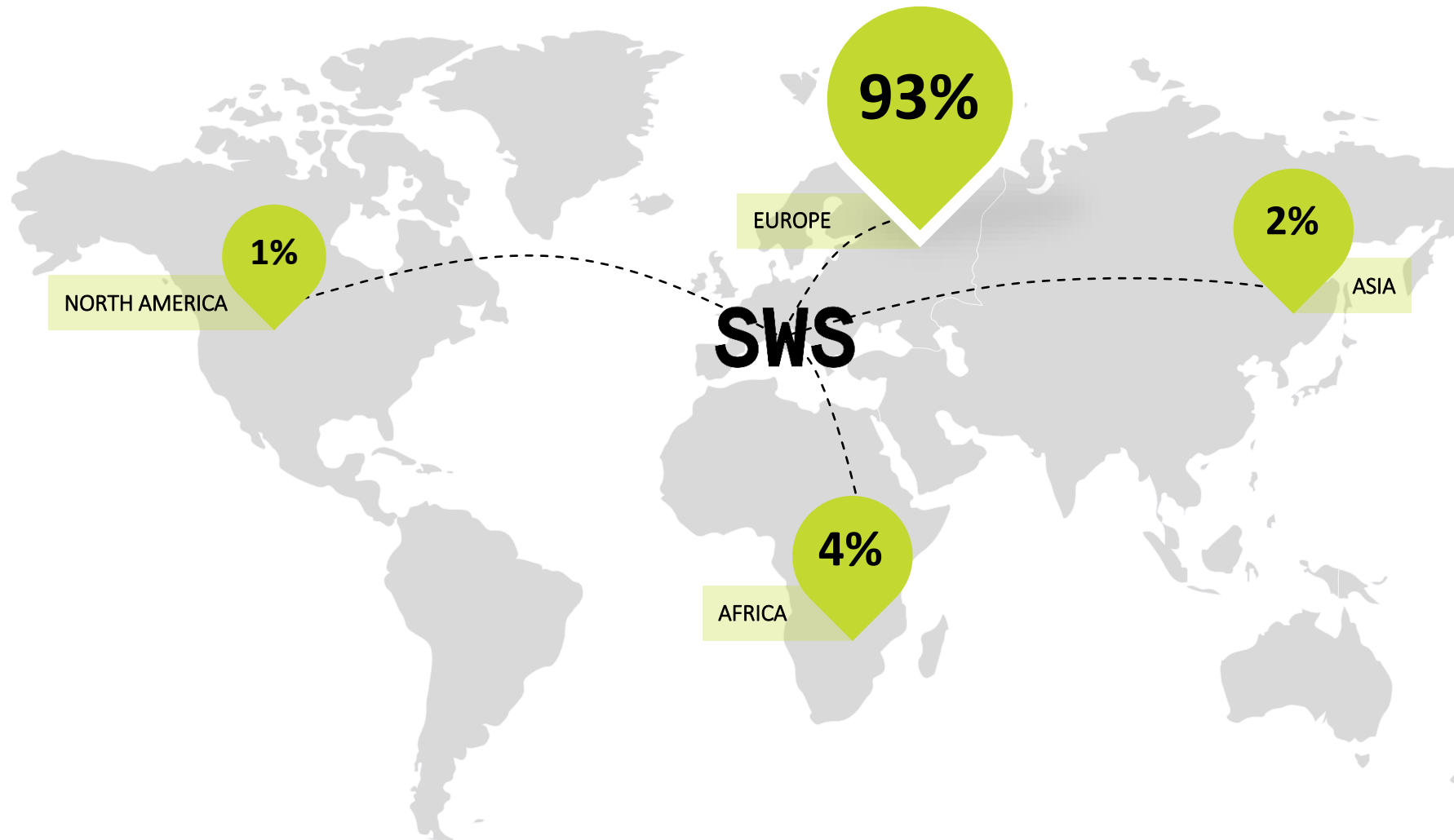
2018

Variable  
Spillway - Patent



# OUR

## Geographical footprint



32

different countries



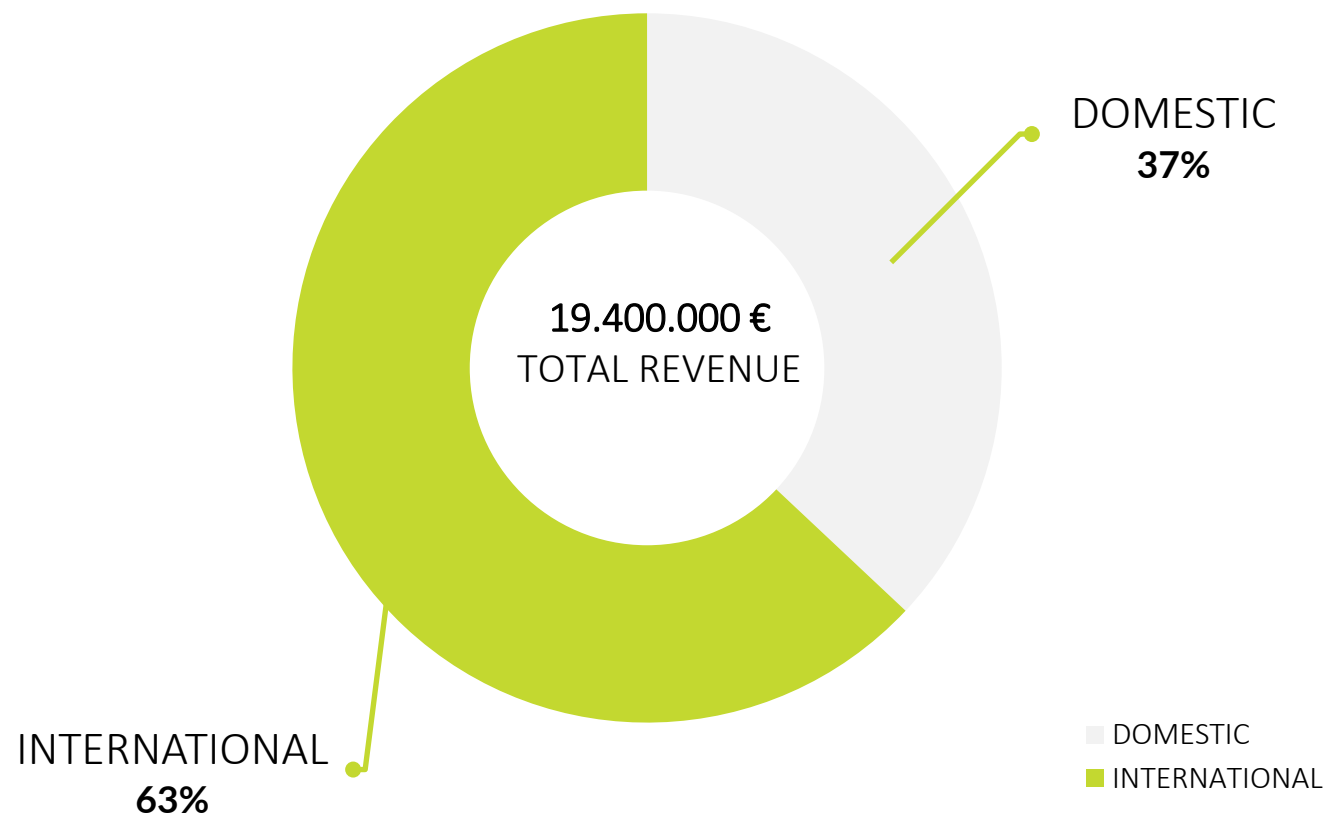
10+

spoken languages



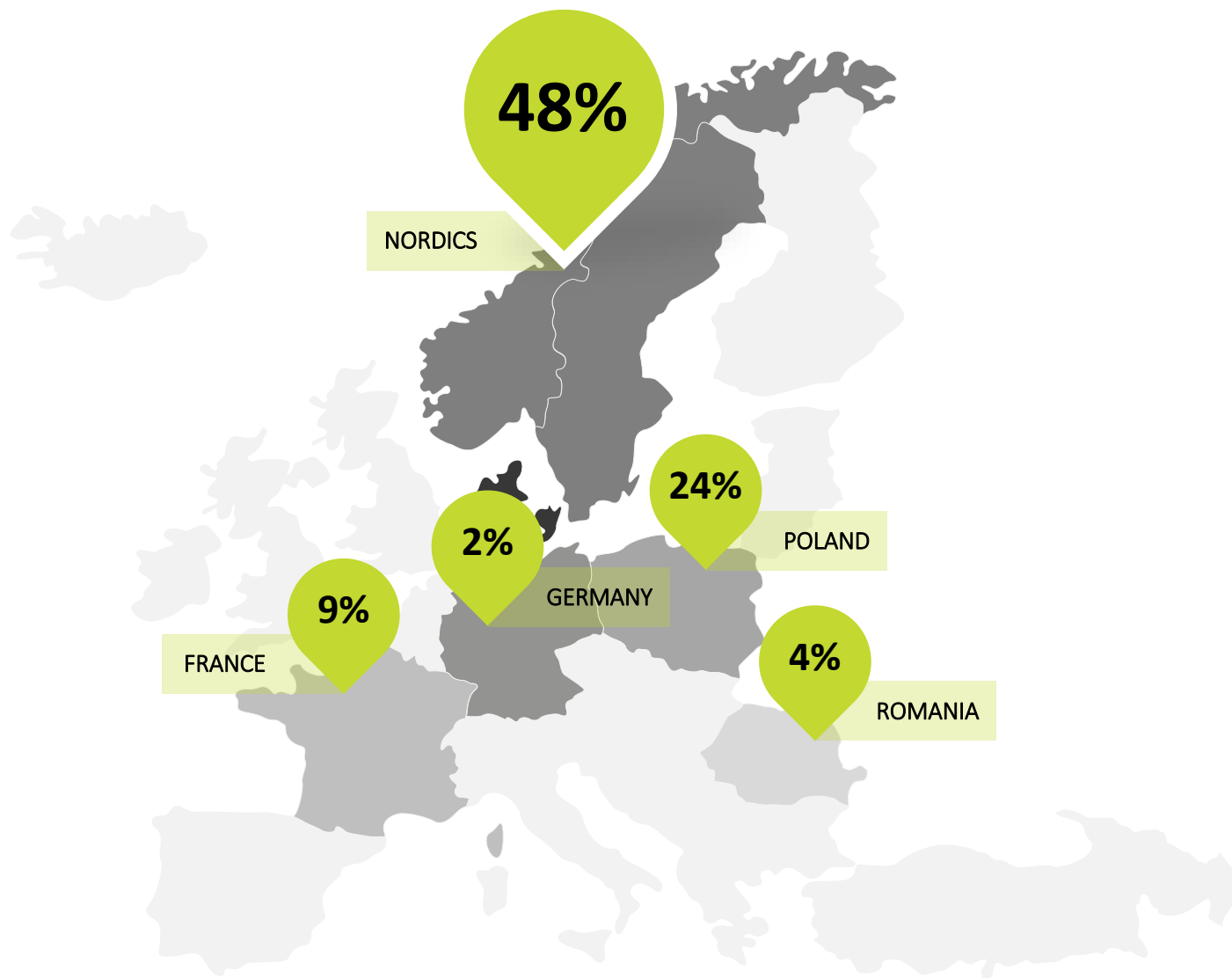
# OUR Total revenues

SWS Engineering S.p.A.



SWS is deeply oriented on the international market with **63%** of the revenues generated abroad.

**63%**  
our business  
outside Italy



SWS is deeply oriented in North and East Europe with more than 85% international revenues.

**85%**  
International  
revenues

## CONTACTS

SWS Engineering S.p.A.

Via della Stazione 27  
38123 Trento, Italy  
Tel. +39 0461 979 000

*email: [sales@swsglobal.com](mailto:sales@swsglobal.com)*

# SWS



[www.swsglobal.com](http://www.swsglobal.com)