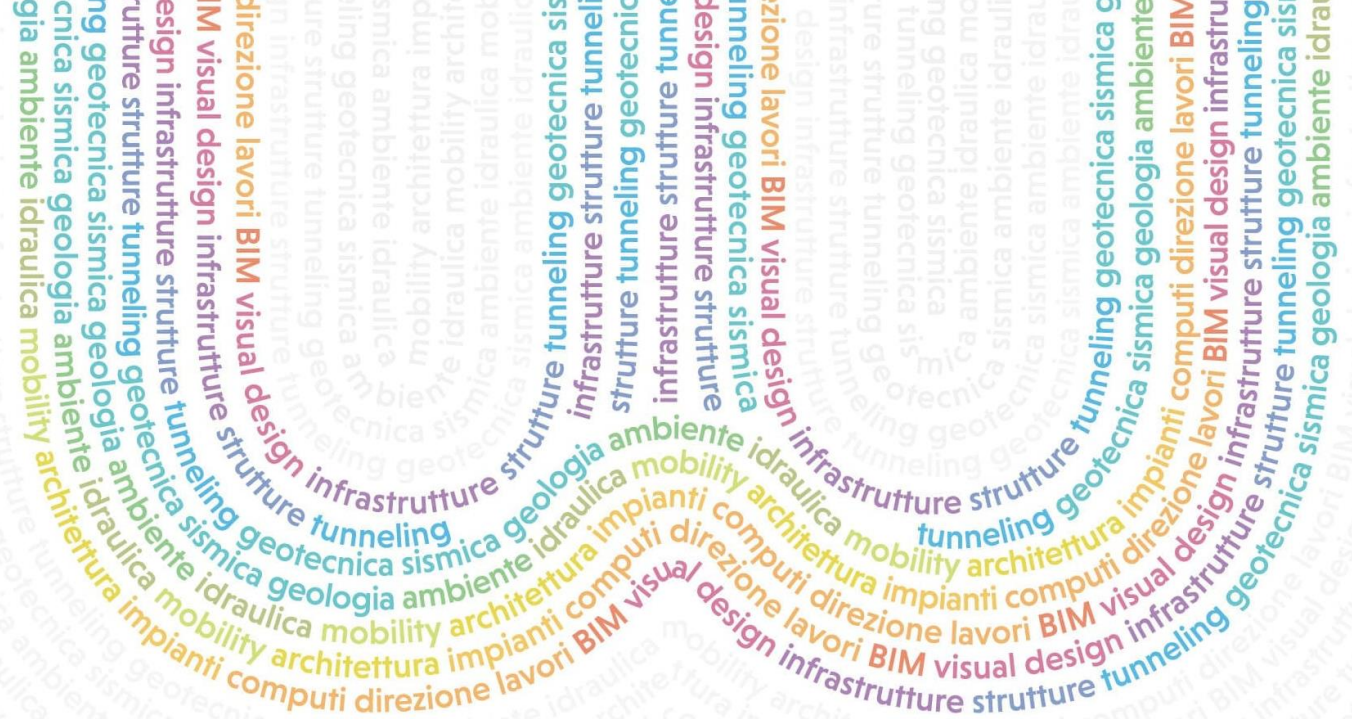


NET Engineering

Company presentation

NET ENGINEERING

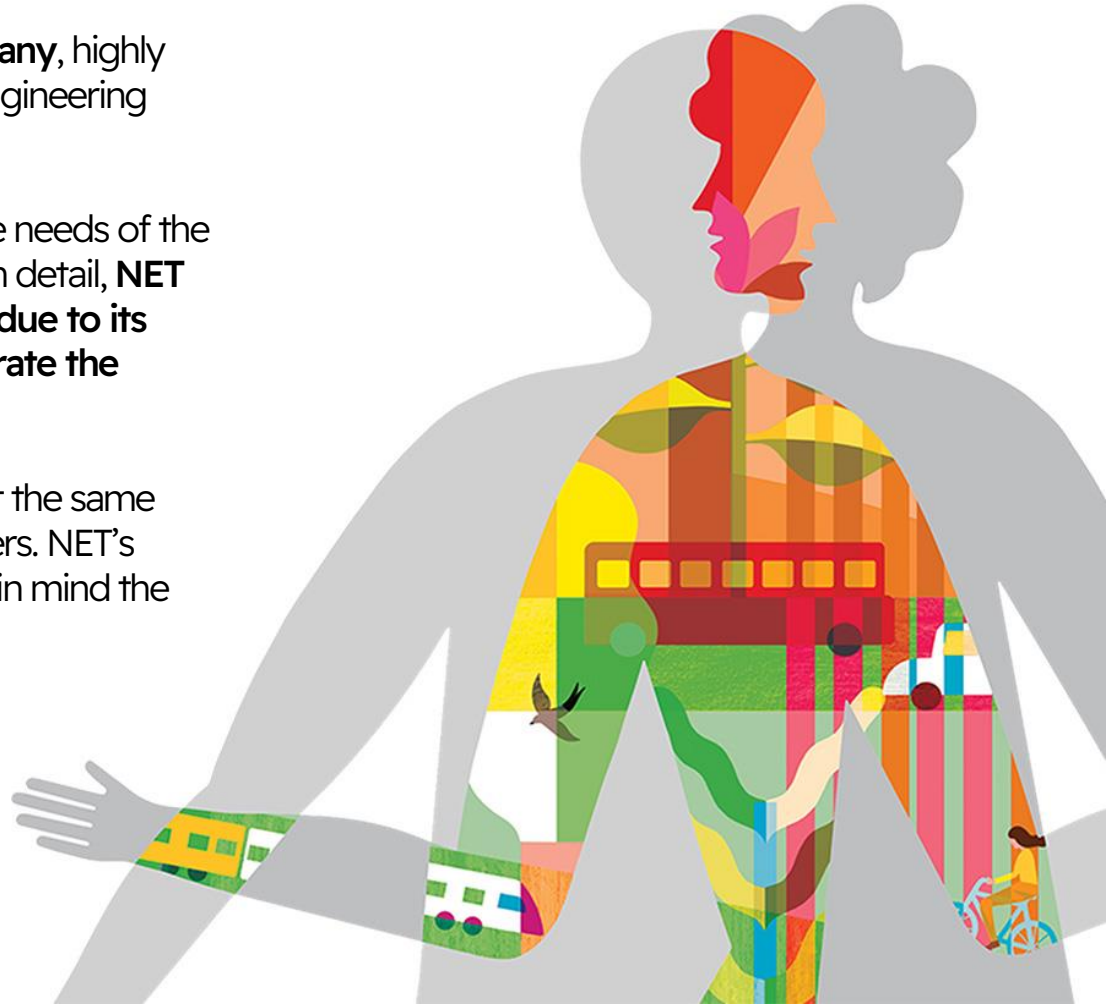
Imagine
Think
Design

Company Profile

NET Engineering is an **independent Italian engineering and architecture company**, highly specialised in the design of transport infrastructure, urban redevelopment and engineering design serving the industrial sector.

As a result of 50 years of experience, NET interprets the context, pre-empting the needs of the market and clients, working with them and indicating the best design solutions. In detail, **NET stands out in the Italian panorama for its ability to manage complex projects due to its high-level specialist skills, the ability to present them in discussions and integrate the contributions**.

NET applies a creative, innovative approach aimed at finding futuristic answers, at the same time ensuring quality of project design and display to the benefit of all stakeholders. NET's mission is System Engineering and responsible planning and design which bears in mind the whole life-cycle of the works.



our manifest

NETE

Purpose

We leave future generations a better territory
than the one we have inherited.

Identity

We are engineering artists, because we want each project to be a work of art. We are greatly knowledgeable of the different skillsets needed to analyse all of our projects as a whole: from defining the problems to be solved to implementing each project task, without losing sight of our overarching vision that allows us to make each project unique and effective.
We describe our projects with great care, picking a communication style that enhances the unique project features and that effectively addresses each stakeholder. We describe our projects with great care, picking a communication style that enhances the unique project features and that effectively addresses each stakeholder.

Vision

We want to be among the first independent Italian engineering and architecture companies with the ability to read our ever-changing world in order to create excellent projects together with our client.

Mission

We design mobility, urban renewal and industry solutions pioneering impeccable engineering practices in the spirit of excellence. We protect what the future generations will inherit by designing smart, shared, sustainable infrastructure.

Facts and figures

staff

141
FTE
06.2023

150
FTE
Forecast
2023

turnover

13.3
M€
06.2023

> 20
M€
Forecast
2023

location

4
OFFICES
Italy

certification

6
UNI EN ISO
9001
14001
45001
UNI 11337
UNI ISO 30415
UNI/PdR 125

Core competencies:
coordination and communication

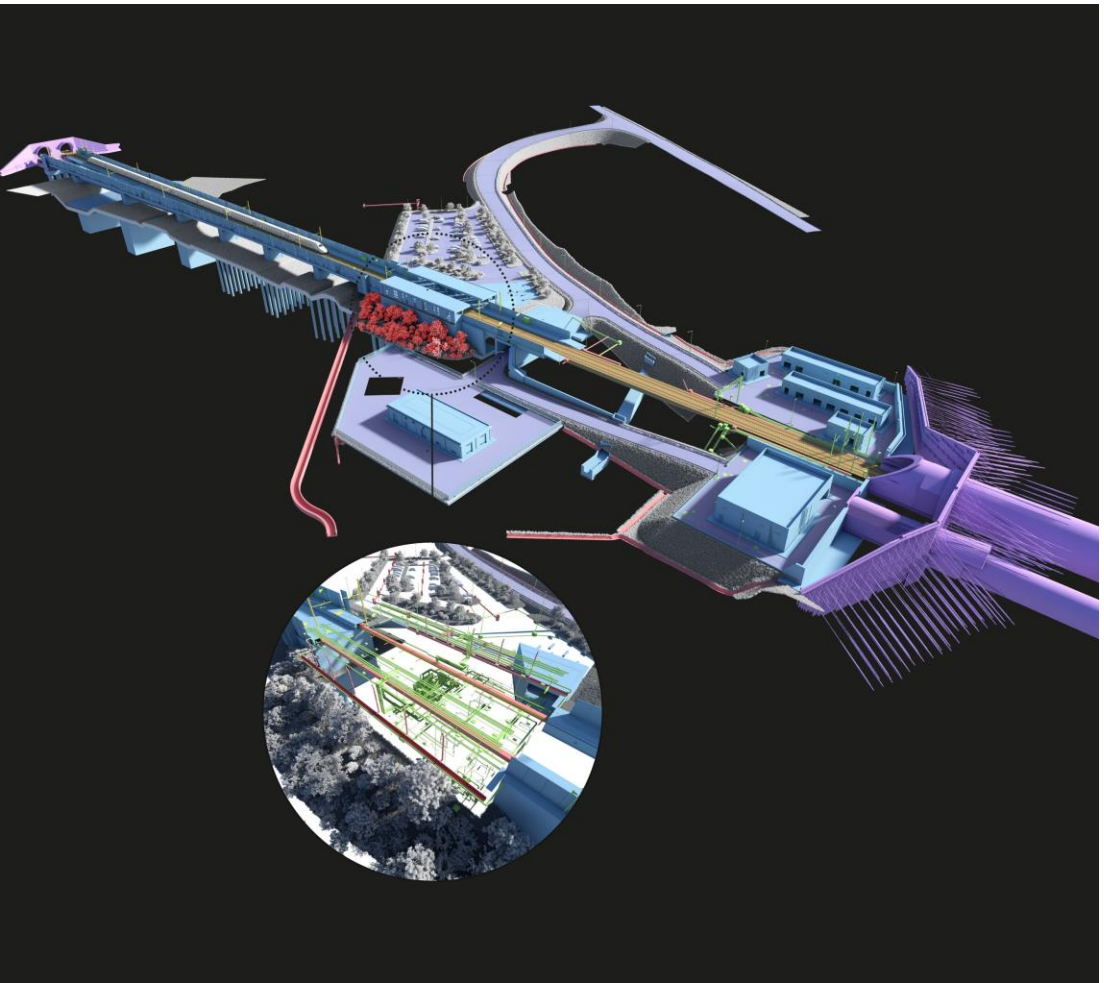
Tendering

Complex projects

BIM

Visual Design

Core competencies:
coordination and communication



Tendering

360° experience in the world of transport infrastructure

Accurate analysis and interpretation of the basic tender project

Understanding of business needs

Integration among different disciplines

Working under pressure and being able to identify quickly the best possible solutions

Core competencies:
coordination and communication

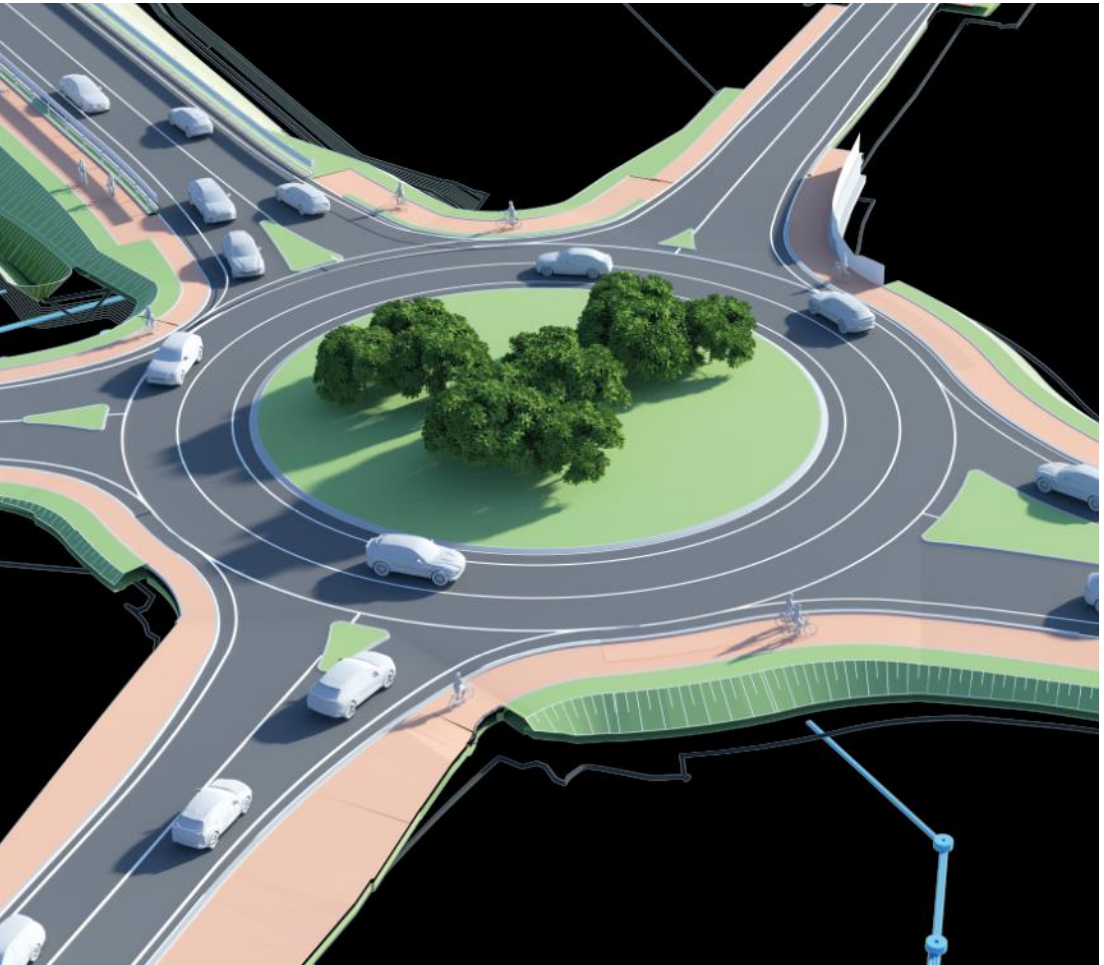
Complex projects

Work organisation: identification of working methods, division of tasks, setting priorities and deadlines

Direct interface with the client, collection and interpretation of requirements

Keeping track of project progress

Core competencies:
coordination and communication



BIM

Creation and organisation of the shared working environment

Definition of technical documentation (OGI, PGI, BEP, etc.) necessary for the development of a BIM project

Implementation of the digital model from the tender phase to the work realisation

Core competencies:
coordination and communication

Visual design

Accurate interpretation of project material, rapid and high-quality processing of visual design product

Communication skills that are clear and effective towards different stakeholders

Services

Dismantling and reconversion

Mobility planning: urban renewal, intermodal hubs and transport terminals

Technical and environmental due diligence

Identification and assistance to the survey plans

Design the dismantling / reconversion of buildings and industrial sites

Operation and maintenance

Environmental impacts consultancies

Yards' impact assessment on traffic and railway operation

Works of art assessment: seismic, static and safety assessment

Planning of consolidation interventions and structural rehabilitation

Optimization studies for the railway operation and TPL (Local Public Transport)

Construction

Construction supervision and safety coordination

Technical supervision of construction works

Construction site planning

Timetable and work progress monitoring

Specialist advice for construction site

Project communication

Programming

Project review

Program management

Market analysis on transport demand

Support for tenders drafting

Clients assistance for defining the interventions priority

Planning

Analysis of alternatives and cost-benefit analysis

Support for the definition of exercise models

Coordination and specialised support to companies during tendering

Urban, regional, wider areas mobility plans

Planning and scheduling of TPL services

Support for the selection and characterization of sites for industrial settlements and for energy production

Risk analysis for industrial sites

Soil safeguard and protection and natural disaster reduction studies

Consultancy for the management of natural resources

BIM Management

Design

Support during permitting processes

Technical-specialistic support for stakeholder engagement

Identification and assistance to the survey plans

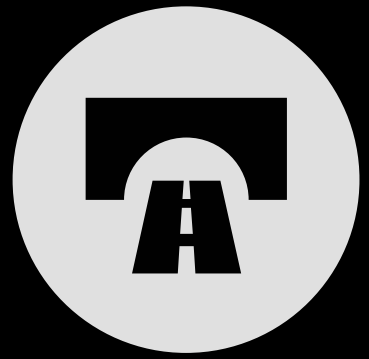
Execution and returning of traditional and 3D surveys

Technical-economic, final /detailed and construction feasibility design

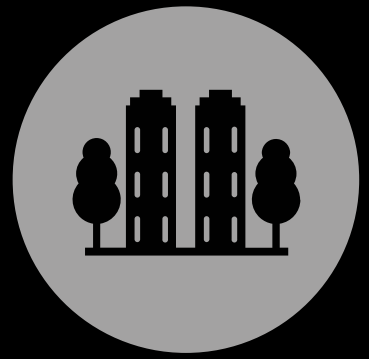
Environmental, hydraulic, geological, geotechnical, plant engineering and structural specialistic studies

Project management

Business areas



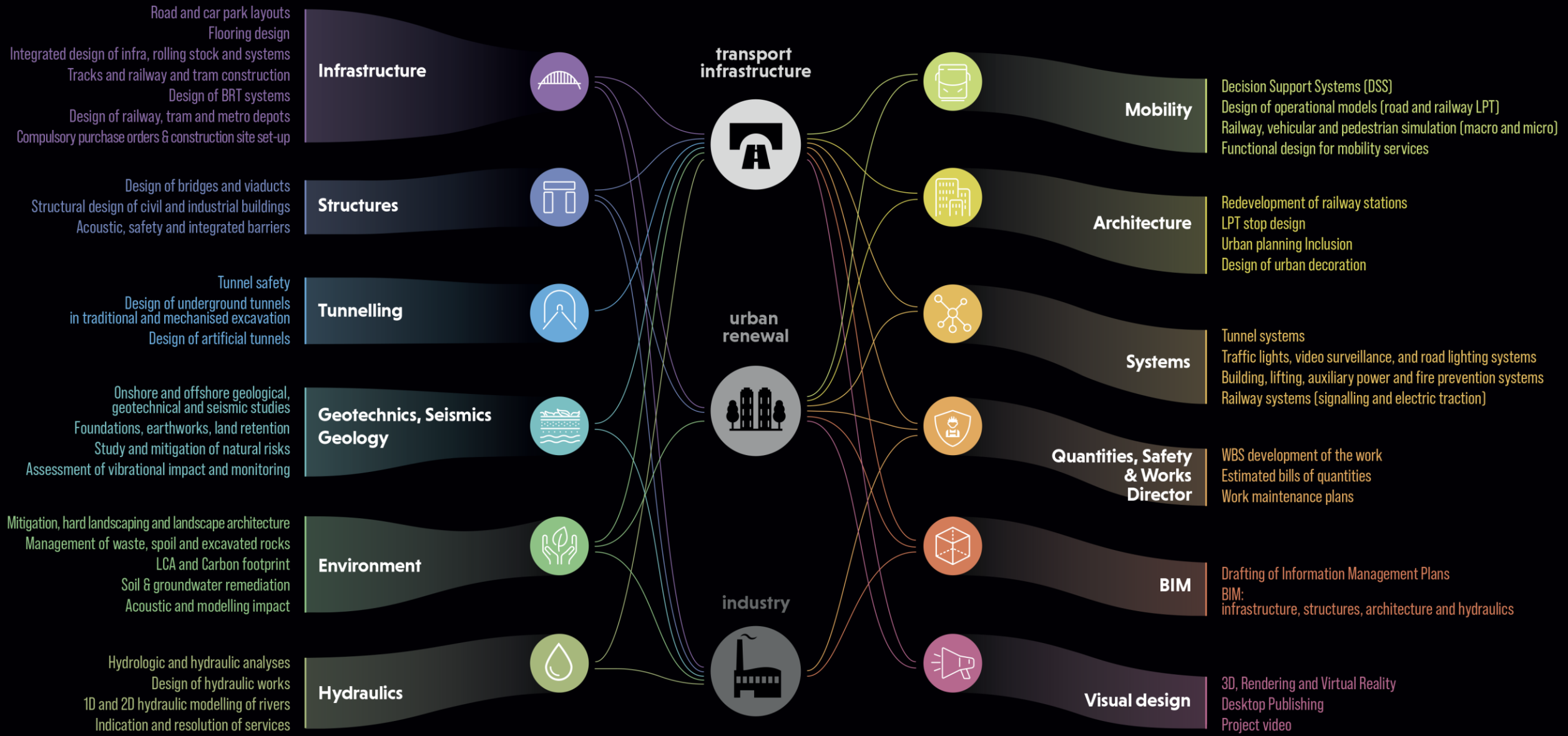
Transport infrastructure



Urban renewal

Industry

Disciplines and technical competences



Transport Infrastructure| Railways

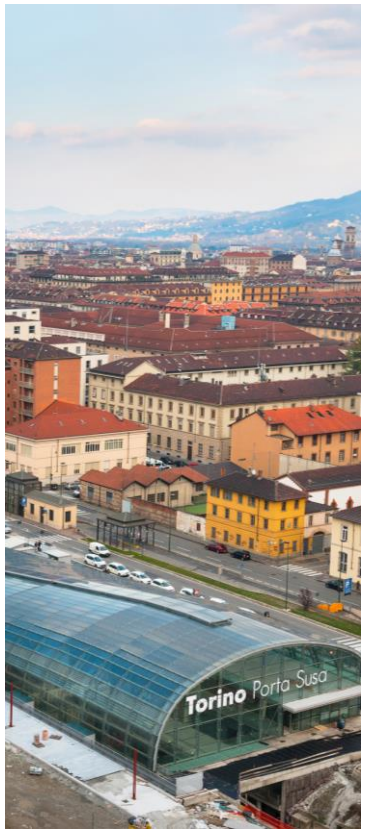
what

- High Speed Lines
- Conventional Lines
- Stations and depots

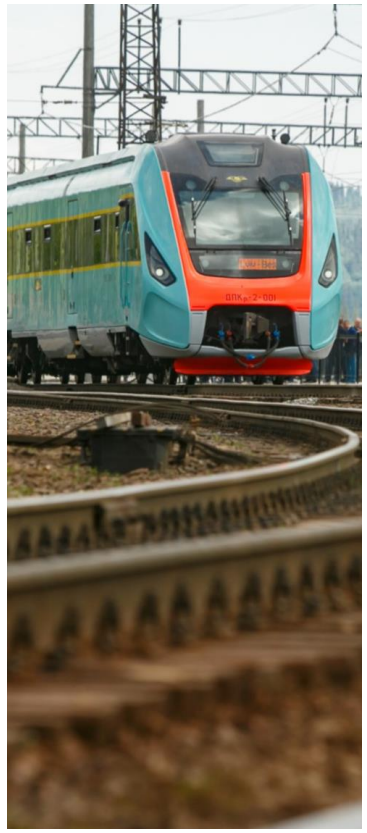
main clients

- European Investment Bank
- Regional and concession railways
- Ukrainian Railways
- Italian consortium for high-speed lines construction
- National Railway Infrastructure Company (Bulgaria)
- Railway operators
- African Development Bank

Railways | Main projects



Railways
Main projects

Strengthening of the Kovel-Yahodyn railway line (Ukraine)

Client: European Investment Bank and Ukrainian railways

What: Technical - economic feasibility project for the rehabilitation and enhancement of the railway section which, starting from the border with Poland, reaches the city of Kovel for a total length of approximately 65km. As it is a double track line, one with a European standard gauge and the other with a Russian gauge, NET Engineering also developed the design of systems for changing the gauge.

Railways
Main projects

Railways of the Balkan area

Client: National Railway Infrastructure Company

What: Preliminary and detailed designs, transport studies, project management consultancy and technical assistance for the construction of a competitive and efficient railway infrastructure to meet the challenges of the EU.

Construction costs: 1.500 M euro

Railways
Main projects

Upgrading of the railway link for El Ferdan Bridge (Suez Canal)

Client: Chengdu Design and Research Institute of Building Materials Industry Co. Ltd

What: Detailed design of the track bundles, armament, excavations, burying, geotechnical interventions, assistance during the construction phase on the longest swing bridge in the world.

Construction costs: 140.000 euro

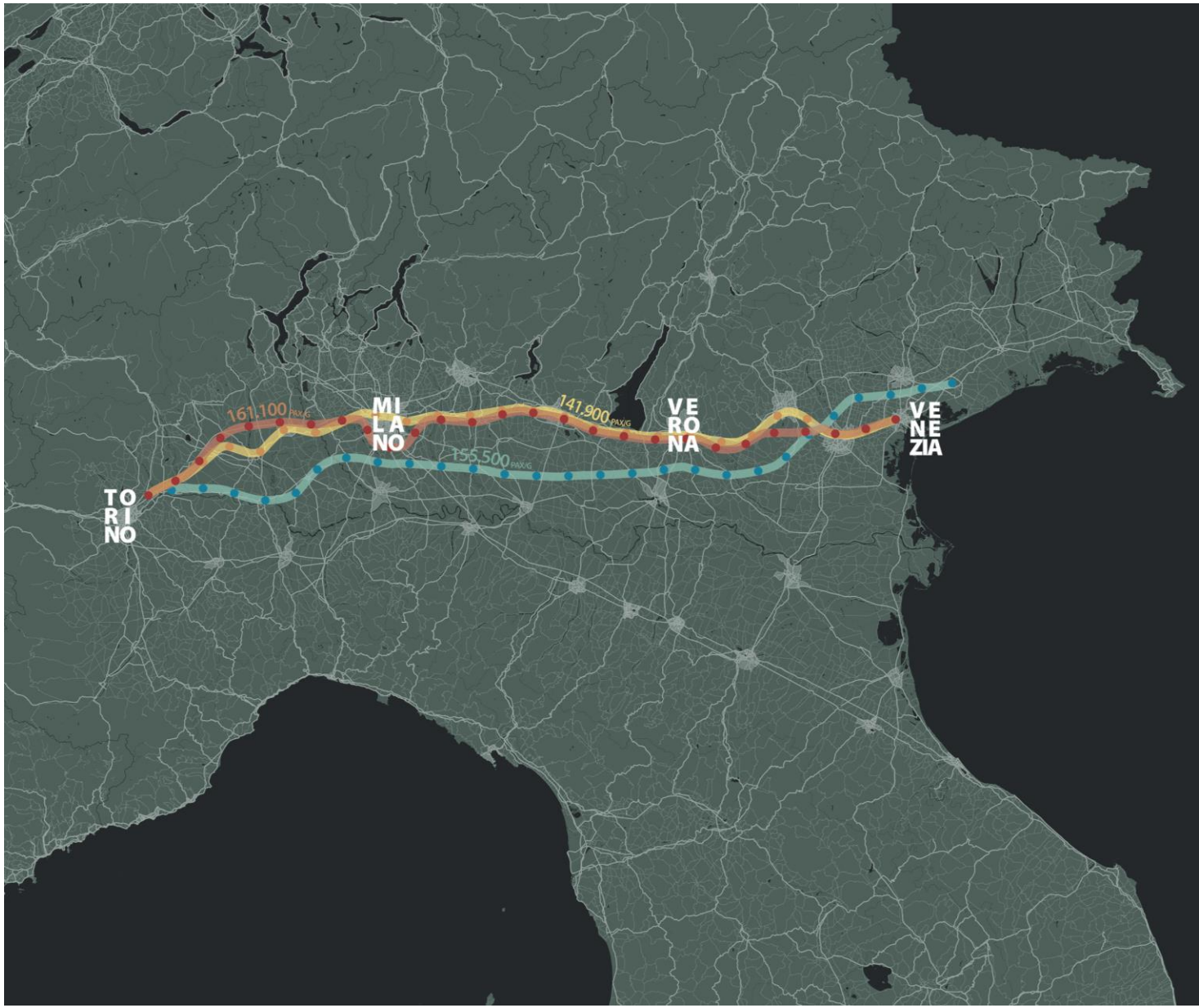
Railways
Main projects

Turin-Venice High Speed Line

Client: Italferr SpA

What: Technical-economic feasibility study of the whole line, (400 km). The study provided elements for the choice of the physical and functional components, performing the cost-benefit analysis, the design and environmental implications of 3 layout and operating hypotheses.

Construction costs: 5.000 M euro



Railways
Main projects

Naples-Bari High Speed Line

Client: RFI SpA - National railway infrastructure company

What: Construction design developed by B.I.M. of the Apice-Hirpinia, Hirpinia-Orsara and Orsara-Bovino sections for an extension of 57 km. In addition to the construction of the new double track line, the project includes 5 tunnels, among which the 27 km long Hirpinia Gallery and new viaducts and stations.

Construction costs: 2.000 M euro

Railways
Main projects

Verona-Vicenza High Speed Line

Client: Italian consortium for high-speed lines construction

What: As part of the construction design of the HS / HC Verona-Vicenza line, NET Engineering carried out the geotechnical, geological, hydrogeological and seismic studies relating to both the general framework and the line sections and carried out the hydrological and hydraulic studies of the water courses interfering with the HS line.

Railways
Main projects

Veneto Regional Metropolitan Railway System

Client: Veneto Region

What: Feasibility study, transport demand analysis, definition of the operational model of rail and road transport, elaboration of timetables, definition of the frequency of service, checks with Opentrack software, environmental impact studies, topographic, geological and environmental surveys, preliminary, detailed and constuction designs, construction works supervision, Safety Coordination (design and construction phase).

Construction costs: 5.900 M euro

Railways
Main projects

Turin railway link

Client: RFI SpA - National railway infrastructure company

What: Detailed design and construction project. The project provided for the upgrading of the railway junction by adding two-line tracks and new stops, and the burial of the urban railway line. The works have been designed keeping the railway traffic unchanged

Construction costs: 545 M euro

Railways
Main projects

Railway variant of the Riga Valley

Client: South Tyrol Transport Structures Company

What: Feasibility study and preliminary design for the construction of the direct southbound connection of the “Val Pusteria” railway including the adaptation of the Municipal Master Plan (PRG) and related structures in the “Bressanone” station. The project also includes the rehabilitation of the interfered roads, the safeguarding of the hydrographic network, the resolution of incompatibilities of network services, the construction site.

Construction costs: 92.5 M euro

Railways
Main projects

Trento railway bypass

Client: RFI SpA - National railway infrastructure company

What: Final and Executive Design of the Trento Railway Bypass. The project consists in a 13 km of new railway line, almost exclusively underground and aims to enhance the southern access to the Brenner Base Tunnel, contributing significantly to the efficiency of international freight transport. NET Engineering was involved in the development of environmental issue, including Envision self-assessment, and the hydraulic design of land and platform.

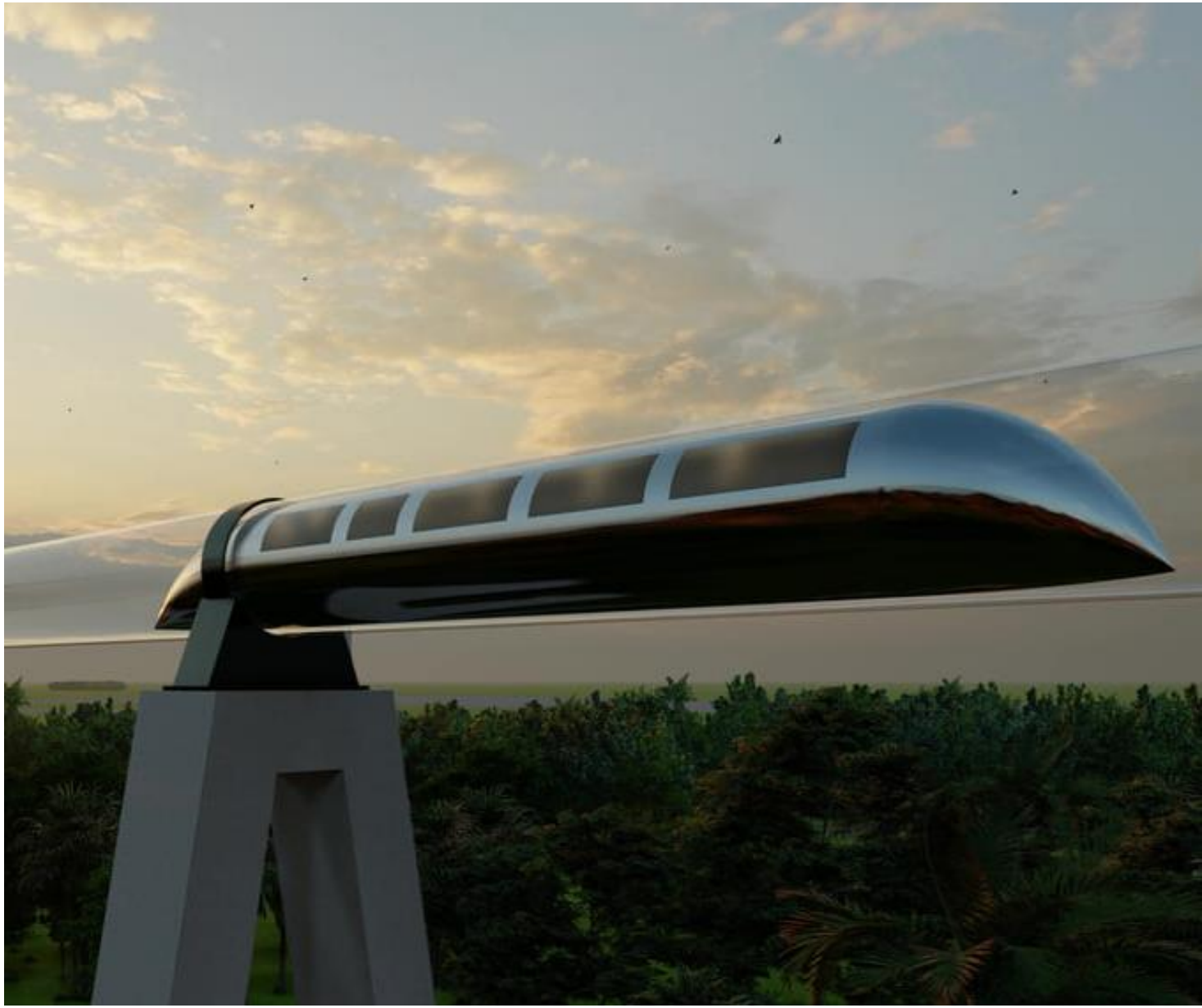
Construction costs: 960 M euro

Railways
Main projects

Hyper-transfer

Client: CAV SpA (Regional roads company)

What: Support in the preparation of tender documents for the identification - as part of a research and development project - of an operator who will verify the technical and economic feasibility of a new ultrafast freight and passenger transport system and design, implement and test a prototype.
NET contributed to the definition of the contents of the technical bid to be produced by the tenderer and the technical contents of the following stages, from design to implementation and testing of the prototype. Further analysis was conducted regarding the implementation milestones and their criticalities.



From projects to the method

excellence

We read the markets and clients' needs ahead of time by collaborating with them and identifying the best design solutions. **We manage complex projects** harnessing our high-level, specialized skillset, and our ability to always enrich it.

understanding

We consider projects as a whole; we manage them by holding all their pieces together and, at the same time, recognising each piece's specific challenges. **We effectively embrace and overcome their complex nature, and we produce practical, measurable solutions**

.

sharing

We promote **stakeholder engagement** through clear planning, **effective communication and complete information** since the early stages of each project.

sustainability

We treat sustainability as a responsibility not as an ideal, but rather as a practical criterion. Our method starts with a **risk analysis** and develops a **number of possible solutions**, identifying the potential downside to each one of them.

Research and Development

Collaboration with universities

Sustainable Infrastructure Association

Association for European Transport

Institute for Building Information Modelling Italy

Collaboration with start-up

Communities of Practice

Research and Development

Collaboration with universities

NET Engineering is part of the Advisory Board of the master's degree course in Mobility Engineering at the Polytechnic of Milan, has developed partnerships and collaborates with the engineering faculties of various universities throughout the country.

Research and Development

Sustainable Infrastructure Association

NET is a member of the Sustainable Infrastructure Association where it makes an active contribution to the ‘Life Cycle Assessment (LCA) for sustainable infrastructure’ work group which aims to facilitate LCA assessment for specific construction processes.

Research and Development

Association for European Transport

NET Engineering is the first engineering company in Italy to join the Board of Directors of the main European organization of transport experts. As a member of the Board of Directors, NET benefits from the network of 200 professionals - from over 35 countries - who adhere to the AET, accesses the main results of research conducted at European level in the field of mobility, participates in discussion boards with some of the most important players in this sector in Europe and contributes to defining the themes at the center of the annual European Transport Conference.

Research and Development

Institute for Building Information Modelling Italy IBIMI

NET Engineering is a member of the Institute for Building Information Modelling Italy - IBIMI buildingSMART Italy, where it leads, in collaboration with the University of Padua, the working group that brings together the operators of Italian Airports, with the aim of generating a homogeneous knowledge base on the subject of BIM and playing an active role in the development of international standards, in synergy with the research carried out by buildingSMART International.

Research and Development

Start-ups and innovative companies

NET Engineering collaborates with start-up aimed at planning the future of urban mobility by designing experimental public transport systems, flexible, scalable, shared mobility services and promoting sustainable mobility. NET develops partnerships with innovative companies and academies active in experimenting with new materials and construction technologies

Research and Development

Communities of Practice

At the same time, NET Engineering promotes research and development internally in the sphere of the Communities of Practice, places for the sharing, exchange and enrichment of knowledge and participants' skills on the topics of common interest. NET also sustains the professional growth of all those who take part in the Community.

NET ENGINEERING

net-italia.com