

NET Engineering

Company presentation



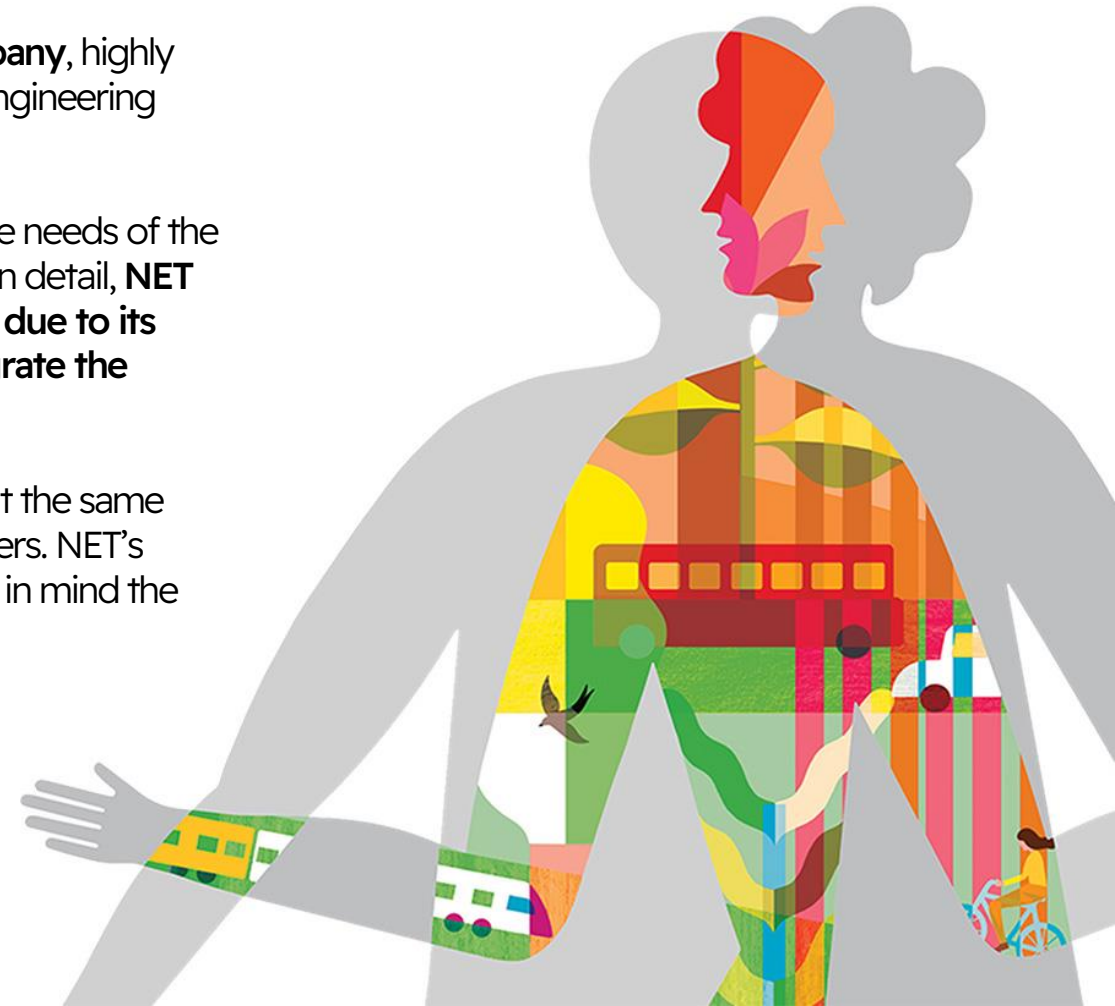
Imagine
Think
Design

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**



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

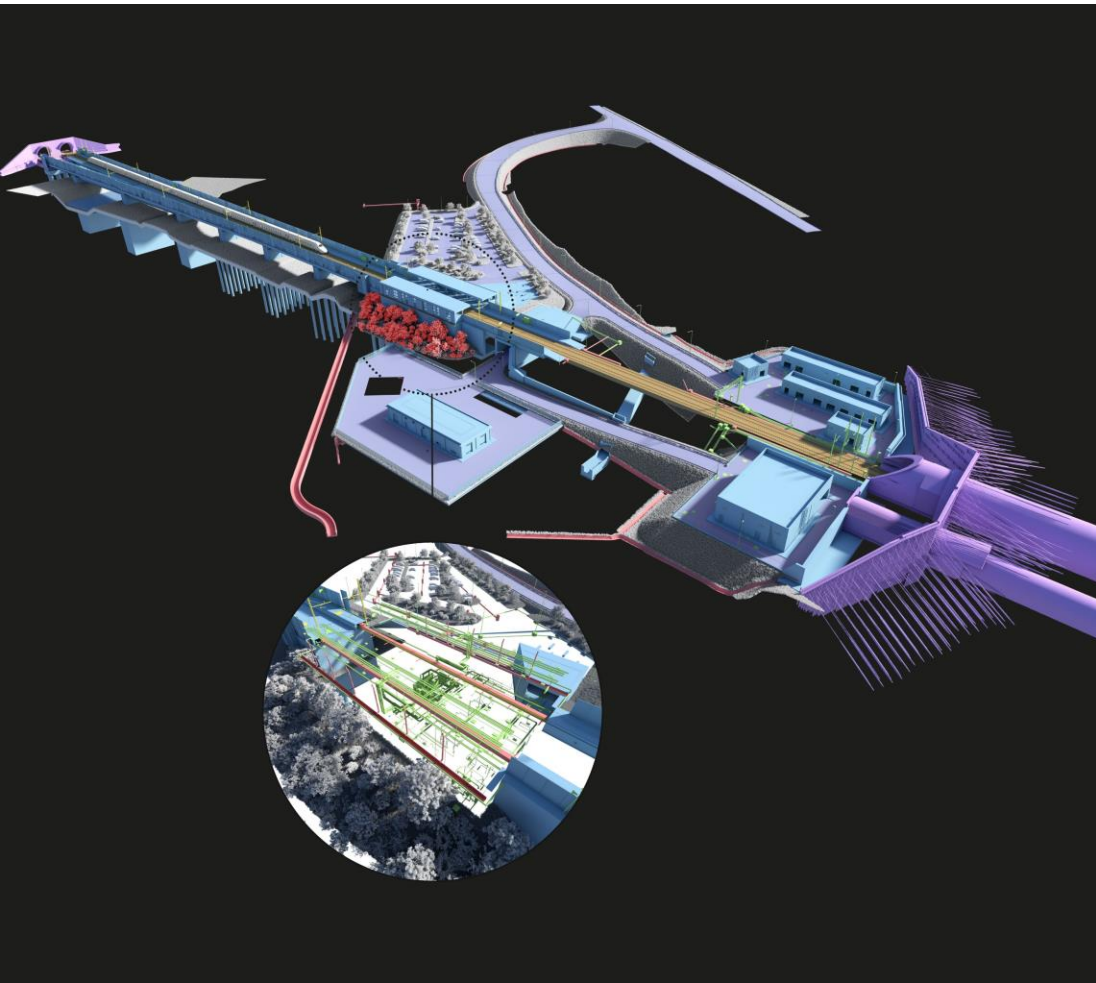
BIM

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

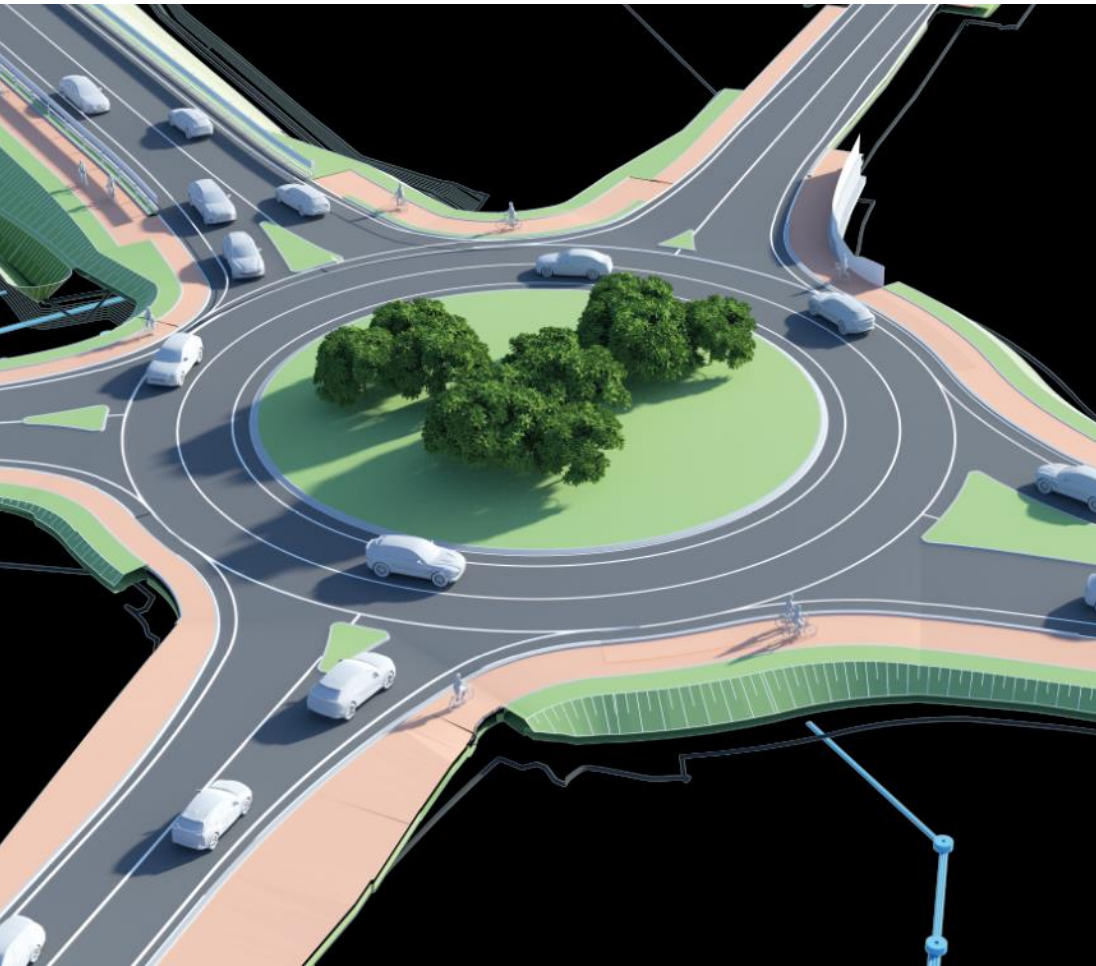
Direct interface with the client, collection and interpretation of requirements

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 reversion

- Mobility planning: urban renewal, intermodal hubs and transport terminals
- Technical and environmental due diligence
- Identification and assistance to the survey plans
- Design the dismantling / reversion 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

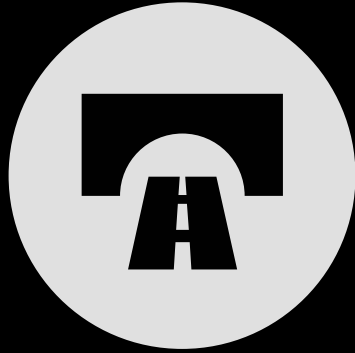
- Analysis of alternatives and cost-benefit analysis
- Support for the definition of exercise models
- Coordination and specialised support to companies during tendering
- Urban, regional, wider areas mobility plans
- Planning and scheduling of TPL services
- Support for the selection and characterization 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**

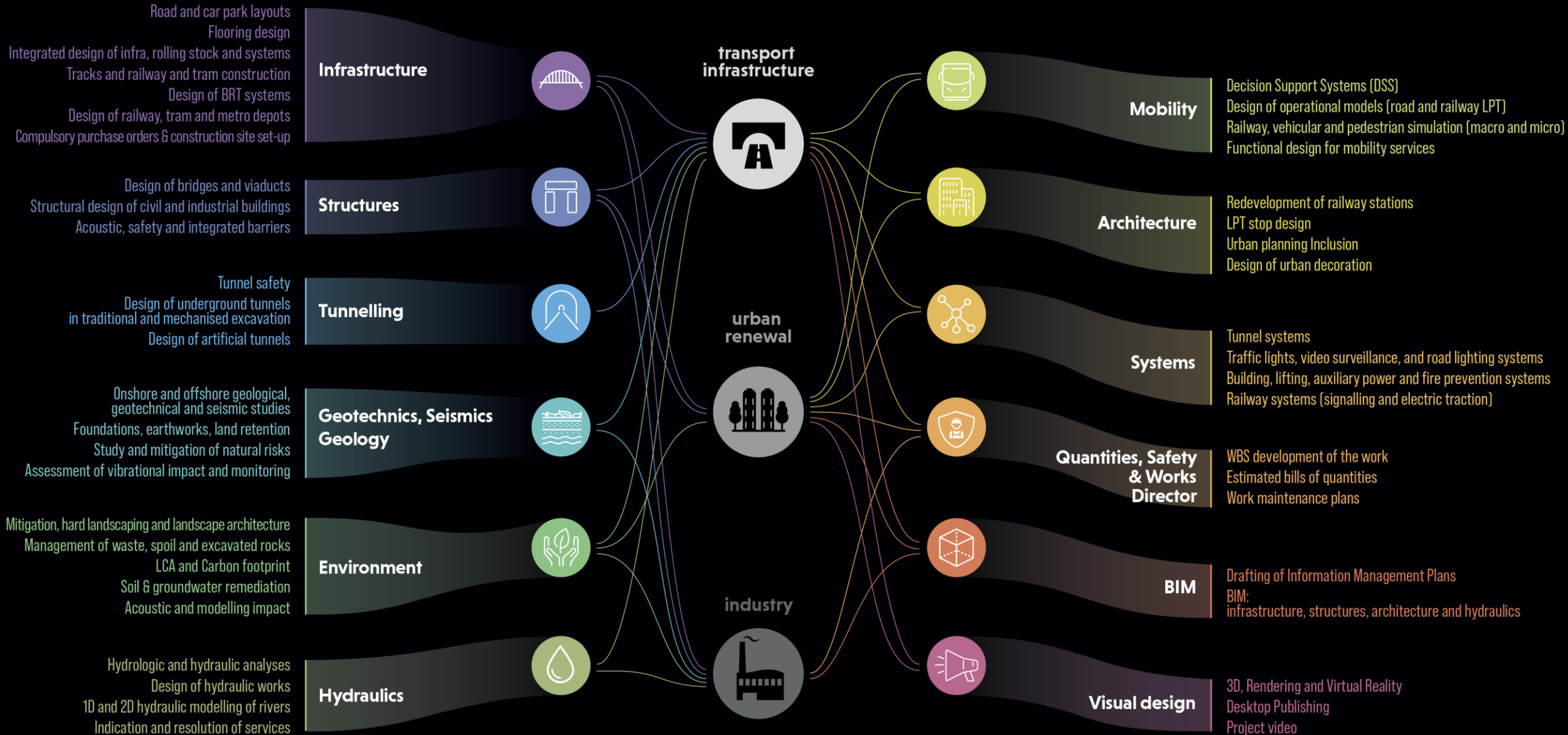


**Urban
renewal**



Industry

Disciplines and technical competences





Transport infrastructure | Roads



what

Major road links and complex routes

Individual and local interventions

Diagnosis and maintenance

main clients

Italian National Roads Authority

Concessionaires for the construction and operation of Italian motorways

Regional roads companies

Public Administrations throughout Italy

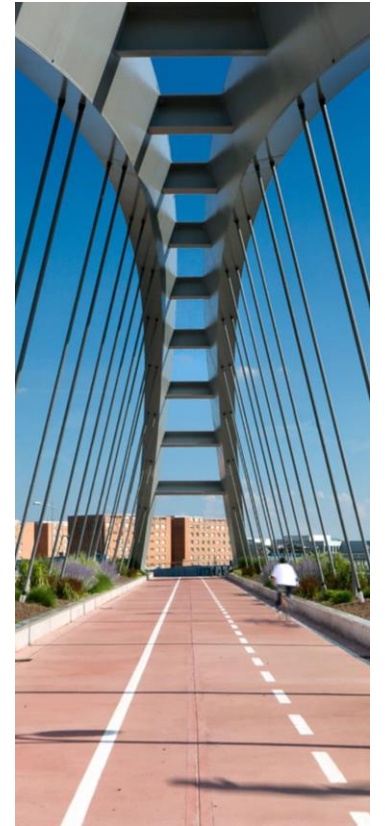
Large infrastructure engineering companies

Italian Society for the Frejus Motorway Tunnel

World Bank



Roads | Main projects





Roads

Main projects

Sustainable evolution of the A4 highway between Brescia and Venice

Client: Autostrada Brescia Verona Vicenza Padova SpA (roads company)

What: Preparatory studies for the preliminary design of the widening of the highway roadway to 4 lanes (Viability, Structures, and Hydraulics): highway widening from 3 to 4 lanes for a total length of 156 km, reconfiguration of interchanges, variants, new roadways and artworks, adaptation of interfering roadways and existing infrastructure, improvement of hydraulic safety of the highway, summary cost estimate of the intervention.

Construction costs: 3.600 M euro





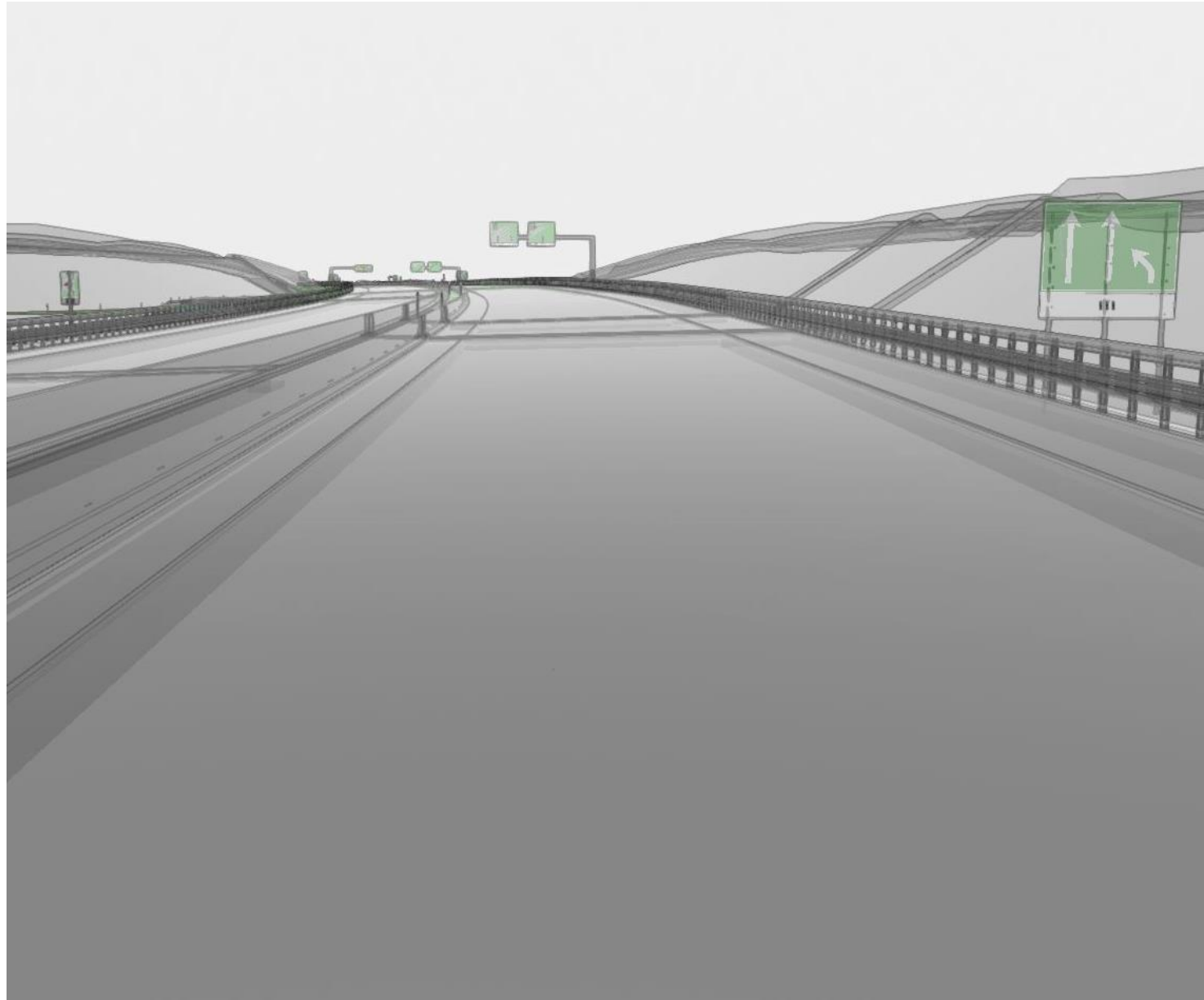
Roads

Main projects

Pedemontana Lombarda Highway - Variant Section D

Client: Pedemontana Lombarda Highway
(roads company)

What: As part of the development of the Final Project, NET Engineering was responsible for BIM modelling of the highway, junctions, minor roads, safety barriers and vertical signage.





Roads

Main projects

The Italian section of the Fréjus Tunnel

Client: Italian Society for the Frejus Motorway Tunnel

What: Construction design and Assistance during construction phase: drafting of technical reports on geology and geotechnics, structures, hydraulics, roads, environment, construction site, safety

Construction costs: 139 M euro





Roads

Main projects

The Baku-Shamakhi road connection

Client: World Bank and International Development Association

What: Selection of alternative routes and Feasibility Study for Shamakhi - Agsu Section of Baku - Shamakhi Road along the corridor that connects the Caspian Sea to Georgia

Construction costs: 162 M euro





Roads

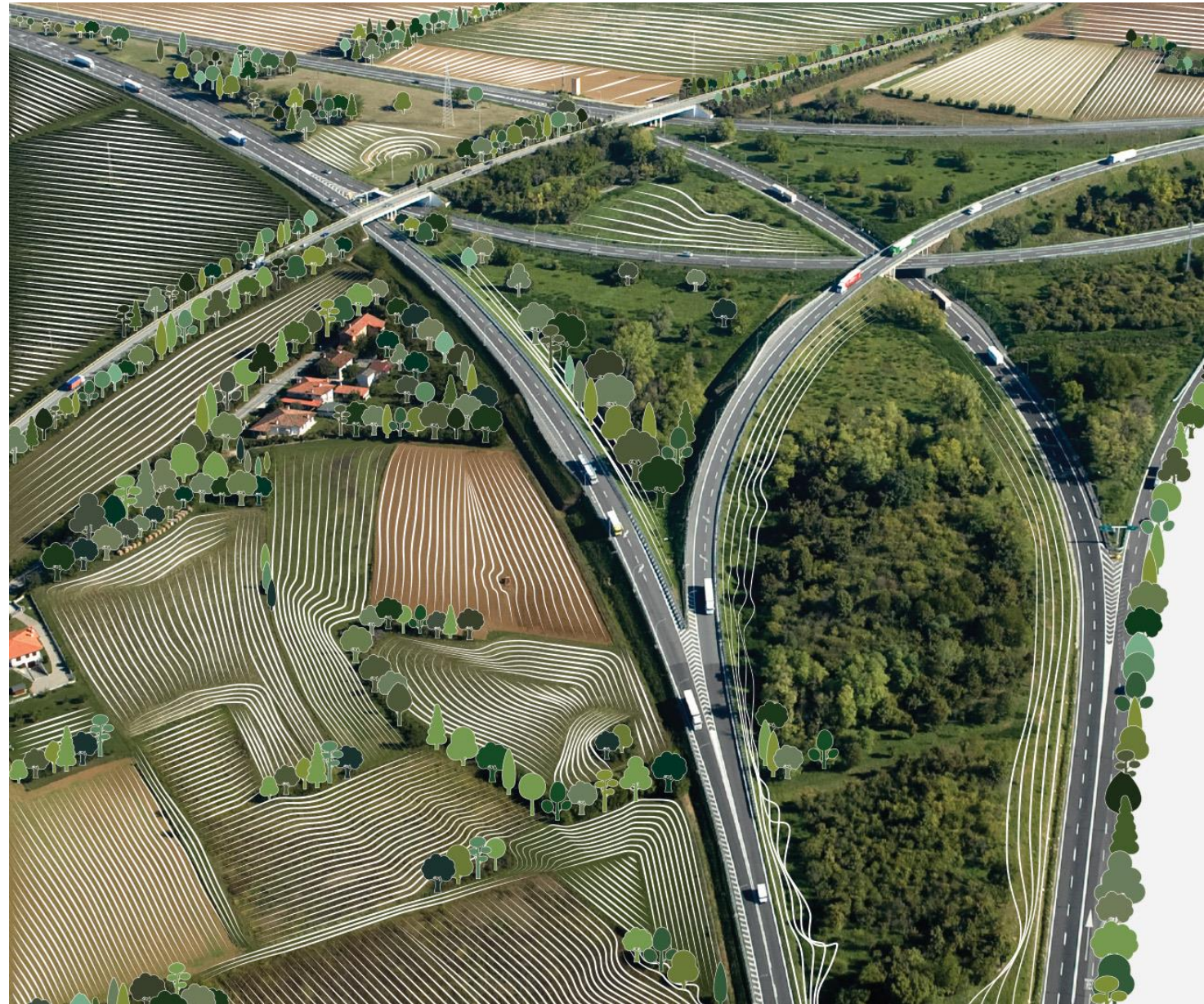
Main projects

The third lane of the Venice-Trieste motorway

Client: Autovie Venete SpA (Regional roads company)

What: Detailed design and environmental impact study: reconfiguration of junctions, variants, new roads and infrastructures, structures adaptation, improvement of the flow conditions of waterways, study of environmental and landscape integration

Construction costs: 682 M euro





Roads

Main projects

Access roads to the macro-island - first industrial area of Porto Marghera (Venice)

Client: Venice Municipality

What: Detailed and construction design, Safety coordination during design phase (CSP), Safety coordination during construction phase (CSE) and construction works supervision. In particular: road design, structures, environment, construction sites, computation

Construction costs: 15 M euro





Roads

Main projects

Investigation and replacement of safety and integrated barriers

Client: Concessionaires for the construction and operation of Italian motorways

What: Survey services, detailed and construction design, Safety coordination during design phase (CSP), Technical Assistance during construction phase.

Construction costs: 160 M euro





Roads

Main projects

Vulnerability assessment and bridges maintenance

Client: Concessionaires for the construction and operation of Italian motorways

What: Evaluation of as-built basic data, survey plans assessment, seismic vulnerability assessment, structures check for static and exceptional loads, design and assessment of reinforcements.

Construction costs: 1.15 M euro





Roads

Main projects

Darwin bridge (PADUA)

Client: Padua Municipality

What: Transport study, Environmental pre-feasibility study, preliminary, detailed and construction design, construction works supervision, Safety coordination during design phase (CSP) and during construction phase (CSE)

Construction costs: 45 M euro





Roads

Main projects

Adriatic Bridge (BARI)

Client: Bari Municipality

What: Preliminary, detailed and construction design, Safety coordination during design phase (CSP) and during construction phase (CSE), construction works supervision

Construction costs: 27 M euro





Roads

Main projects

Leonardo Bridge (AREZZO)

Client: Province of Arezzo

What: Preliminary, detailed and construction design, Environmental Impact Study, Safety coordination during design phase (CSP) and during construction phase (CSE), construction works supervision.

Construction costs: 44 M euro





Roads

Main projects

«Unità d'Italia» Bridge (PADUA)

Client: Padua Municipality

What: Detailed and construction design,
Safety coordination during design phase
(CSP)

Construction costs: 15 M euro





Roads

Main projects

Bridge over Ticino river at Oleggio (NOVARA)

Client: Province of Novara

What: Preliminary, detailed and construction design, Environmental Impact Assessment, Safety coordination during design phase (CSP) and during construction phase (CSE), construction works supervision, detailed hydraulic study

Construction costs: 17.5 M euro





Roads

Main projects

New Becca Bridge (PAVIA)

Client: Infrastrutture Lombarde S.p.A. (now incorporated by ARIA S.p.A.)

What: Feasibility Project: definition and comparison of alternatives, design study of the chosen solution

Construction costs: 79 M euro



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-italia.com

