

YSC

May 2025

The Project

Young Smart Cities will deliver a high-quality educational tool that facilitates the engagement of the youngest citizens in Smart City solutions. The YSC Portal will include Lesson Plans, Trainings, Contests, Forums, Knowledge Pills, etc. that will help students and teachers co-design solutions to some of the challenges that require a multidisciplinary approach. It will build skills that are relevant worldwide and support pan-European exchanges and strengthen social cohesion and active citizenship.

Young Smart Cities



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A European Erasmus+ Project

Our Newsletter Second Edition

Young Smart Cities is an innovative Erasmus+ project. It shows how we can work together across generations and institutions to implement young perspectives in real cooperation. We are pleased to present this project to you in this first issue of the YSC Newsletter.



Our second meeting in Florence, in March 2025

www.ysc-eu.net/en

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Foreword

Dear Readers, dear Fellow City Shapers,

It is with great enthusiasm that we share with you the latest developments from the Young Smart Cities project. After laying a solid foundation in the initial months, our consortium has taken important steps forward in bringing the project to life. The YSC platform is now fully operational and enriched with content, thanks to the dedication of partner schools and the creativity of students across Europe.

At the heart of our approach is Problem-Based Learning (PBL), introduced to partner schools through tailored training sessions and video materials that support teachers in designing interdisciplinary, skills-oriented learning journeys. This method empowers students not only to understand complex urban challenges but to take an active role in finding innovative and sustainable solutions.

Our first student survey – conducted in four languages and involving about 150 pupils – provided valuable insight into how young people perceive Smart Cities and the skills they believe are essential for shaping them. The responses are helping us fine-tune the educational tools and make the platform more engaging and relevant to their expectations.

A major highlight has been the collaborative development of “Knowledge Pills” – short, focused documents created by students themselves. These explore themes such as Greening the City, Smart Mobility, Revitalising Old Housing, and Reducing Energy Consumption. Far from being purely academic, these Pills are designed as resources to support the analysis and resolution of real case studies proposed by our partner municipalities. In this way, students are not only acquiring knowledge but directly applying it to real urban challenges in their communities.

We are now preparing for an exciting new chapter: opening the platform to more schools across Europe. This pilot phase will expand our community of learners, deepen the exchange of ideas, and reinforce our mission to empower the next generation of smart, sustainable city-makers. What began as a shared vision is now becoming a dynamic reality.

With warm regards,

Luciana Stortoni
Project Manager
University of Siegen

Project description

YOUNG SMART CITIES

Young Smart Cities propose to equip youth (aged 12-16) with the right skills to contribute to the building and growth of Net Zero Smart Cities and join a global network of next-generation leaders that will set the trends for a more sustainable and healthy life in cities.

Project duration and funding: 3-year project (2024-27), with a budget of EUR 400 000

Erasmus+ 2023 Call: Partnerships for cooperation are transnational projects designed to develop and share innovative practices and promote cooperation, peer learning, and exchanges of experiences in the fields of education, training, and youth.

PROJECT SUMMARY: KNOWLEDGE-BUILDING AND ACTION

Young Smart Cities: A Fruitful Meeting in Florence's Historic Conservatorio

On 10 and 11 March, the partners of the Young Smart Cities project met in Florence for an engaging and productive two-day meeting. The gathering took place in the beautiful and historic Conservatorio Santa Maria degli Angeli, a truly inspiring venue that provided an ideal backdrop for reflection, exchange, and planning.

The meeting marked a turning point in the project's progression. All participating schools are now well-prepared to finalise their Knowledge Pills and to develop in class the selected learning situations, tailored to the urban challenges identified by students.

Another key outcome was the finalisation of the skills training content, which will now be implemented in the form of videos to support teachers and students. These video modules are designed to develop essential 21st-century skills such as critical thinking, creativity, and collaboration—core competencies for young people engaged in shaping the cities of the future.

The partners also defined the structure and goals of the project's blog, a central tool that will amplify and empower students' voices throughout the YSC journey. The blog will serve as a dynamic space for sharing experiences, reflections, and creative outputs, making visible the students' engagement and their visions for smarter, more inclusive cities.

The Florence meeting not only helped consolidate the work carried out so far but also strengthened the shared vision of the Young Smart Cities initiative: empowering students to become active citizens capable of transforming their communities.

Comprehensive Internal Analysis – Young Smart Cities Student Survey (2024)

How Smart Are Smart Cities — According to Young People?

What do students from four European schools think about the future of urban life? What does the term Smart City really mean to young people? Is it just about digital tools and innovation, or does it also touch deeper questions — like fairness, sustainability, education, and inclusion? These questions were at the heart of a cross-border survey launched as part of the Young Smart Cities project. About 150 students aged 12 to 16, from schools in Florence, Bologna, Pulheim (Germany), and Piaseczno (Poland), were asked to reflect on their values, the challenges of urban life, and their understanding of technology in the context of the cities they live in. The answers they gave — through both closed and open questions — reveal a generation that is thoughtful and engaged, curious and cautious, ready to imagine better futures, but also aware of the risks.

A familiar term, but not always a clear concept

Most students had heard the expression Smart City, but many admitted they weren't entirely sure what it meant. Definitions ranged from basic interpretations like "a city with a lot of technology," to more advanced and structured ones that described smart cities as digitally optimized, environmentally sustainable, and responsive to citizens' needs. Some students imagined places where public services are automated, waste collection is managed by artificial intelligence, and mobility is coordinated through smart traffic systems. Others spoke of solar-powered buildings, pollution sensors, or platforms that allow citizens to communicate directly with city authorities. Several defined a Smart City as a place that protects the environment while making daily life easier. But alongside this enthusiasm, there was uncertainty. A number of students stated that they had heard the term but didn't really know what made a city "smart." For many, it remained an abstract concept — something that sounded modern, but whose real-world impact was not yet visible in their own experience.

Technology and values: a complex relationship

When asked to describe how a Smart City might improve urban life, students responded with a mix of optimism and critical thinking. Many emphasized the potential benefits of technology: cleaner air, safer public spaces, better access to education, and more efficient city services. They described how sensors could monitor traffic and pollution, how digital platforms could allow faster communication with authorities, and how artificial intelligence could optimize energy use or public transport schedules.

At the same time, several students raised important concerns. Some worried about the risk of constant surveillance, suggesting that smart technologies could become tools for control rather than empowerment. Others feared growing inequality — warning that not everyone has the same access to digital devices or high-speed internet. A few even questioned whether technology might replace too many human jobs, or lead to an overdependence on systems that could fail.

In short, students see the potential of smart technologies, but they also insist on asking: who benefits, who is left behind, and what is the real cost of becoming "smart"?

Digital access: important, but not enough

One of the clearest areas of agreement across all schools was the importance of digital access. Students overwhelmingly said that having access to the internet and digital devices is essential — especially for studying, staying informed, and being part of society.

In their responses, many emphasized how critical technology had become to their education, particularly since the COVID-19 pandemic. Others noted that without digital access, people can easily become invisible or excluded, unable to participate in decisions, services, or even social life. Some students described the internet as a basic right — something every city resident should have, regardless of income.

Still, a few voices offered a more nuanced view: some students raised concerns about overuse, the risk of addiction, and the loss of direct human contact. Technology, they suggested, is a powerful tool — but it must be used with care and purpose.

What makes a city work — and who makes it work?

The survey also explored how well students understand how a city functions, and who is involved in keeping it running. When asked to name the professions involved in managing a city's infrastructure — from roads and power lines to schools and garbage collection — many students listed bus drivers, teachers, electricians, cleaners, and garbage collectors. Some also named engineers, architects, or IT technicians. These answers show that students recognise the essential roles behind the scenes of urban life.

However, the level of civic knowledge varied widely. When asked to explain the difference between a city council and a city administration, most students struggled. Many left the answer blank or wrote simply "I don't know." Others confused the two or assumed both were part of the same body. Only a few managed to describe the difference accurately — that the council makes decisions and sets priorities, while the administration handles the daily management and implementation.

These findings underline an important gap. Students live in cities; they experience their problems and potential every day — yet many are unsure how decisions are made or who is responsible for what. This disconnect is one of the most relevant challenges for the Smart City idea: how can a city be smart if its future citizens don't understand how it works?

Problems on the ground — and the will to change

When asked whether there are challenges in their cities that need to be solved, the vast majority of students said yes. Their answers were often specific and grounded in daily experience: dirty streets, unsafe or unlit public spaces, unreliable or insufficient public transport, traffic congestion, noise, and a lack of green areas or safe gathering spaces for young people.

Some mentioned inequality between neighbourhoods, or frustration at seeing investments in one area while others were neglected. Others pointed out a lack of public respect or civic responsibility, such as littering, vandalism, or people ignoring rules.

In their justifications, students often showed a strong sense of awareness and realism. They were not just complaining but pointing to real issues they wanted to help change. And while the survey did not ask whether these changes were realistic, many answers reflected a desire to act, to participate, and to see results.

Are Smart Cities always a good thing?

In the final part of the survey, students were asked if they believed there were any disadvantages to the concept of Smart Cities. Many said yes — and explained why.

The most common concerns were about privacy and surveillance, with some students worried that constant monitoring could lead to control or manipulation. Others pointed to risks of inequality, if only part of the population benefits from new technologies. Several mentioned fear of job losses, or the idea that depending too much on machines could make people less autonomous or reduce human connection.

Some defended the concept, saying that Smart Cities are only dangerous if misused — and that technology itself is neutral. A student from Poland wrote: “If it’s used with fairness and transparency, then it’s good. The problem is who uses it and how.”

A Smart City is not just a digital city — it’s a shared project

The Young Smart Cities student survey shows us a generation that is deeply aware of the world around them. These students care about education, safety, equality, the environment — and they understand that cities play a key role in all of these issues.

They are not blindly enthusiastic about technology. They ask good questions. They want inclusion, not just efficiency. They want real solutions, not just smart slogans. And most of all, they want to be part of the conversation.

If we want cities that are truly smart, we need to build them not just with code and data, but with understanding, participation, and trust. That means investing in civic education. That means listening to young people not as future citizens, but as citizens already — with insights, questions, and ideas worth hearing.

Because in the end, a Smart City is not just a city that works — it’s a city that listens.

Europe and Smart Cities

A comparison of smart city developments in Germany, Italy, Poland, and Spain

The digital transformation and climate change require innovative solutions for urban development. Italy, Germany, Poland and Spain are pursuing different strategies to make their cities smarter and more sustainable. While some countries are focusing on digital administration and mobility, others are focusing more on green technologies and climate neutrality.

Germany: Digital administration and sustainable mobility

Germany is driving the development of smart cities with a strong focus on digital administration and intelligent mobility. Cities such as Hamburg and Berlin are among the pioneers: they are focusing on networked transport systems, smart energy supply and digital citizen portals. The expansion of e-government services enables more efficient administration and reduces bureaucratic hurdles. Germany is also promoting the switch to environmentally friendly means of transportation such as electric cars and bicycles through intelligent traffic management systems and an improved charging infrastructure.

Italy: Innovative projects and EU funding

Italy is increasingly using EU funding to finance intelligent urban development. Milan in particular is regarded as a smart city pioneer: the city relies on smart grids, a digital networking of energy supply systems, to optimize electricity consumption. Italian cities are increasingly experimenting with artificial intelligence for traffic control. There are also numerous sustainable architecture projects aimed at reducing energy consumption and improving the urban microclimate. The combination of technological innovation and sustainable urban planning makes Italy an important player in the field of smart cities.

Poland: Smart infrastructure and energy-efficient solutions

Poland is pursuing a pragmatic strategy with a focus on smart infrastructure. Cities such as Warsaw are increasingly focusing on energy-efficient lighting systems and intelligent traffic light control for traffic optimization. Thanks to EU funding, numerous innovative projects have been implemented, including smart parking systems and digital administration platforms. Particularly noteworthy is the expansion of smart lighting technology, which not

only reduces energy consumption but also helps to improve safety in public spaces. Poland shows that great progress can be made in the field of smart cities, even with limited financial resources.

Spain: Climate-neutral cities and sustainable mobility

Spain is focusing on environmentally friendly urban development and climate neutrality. Cities such as Valencia and Barcelona have ambitious climate protection plans to drastically reduce CO₂ emissions. The promotion of sustainable mobility is central to this: In addition to cycle paths and low-emission modes of transport, Spanish cities are increasingly focusing on agroecology and urban greening. The aim is to create a sustainable and liveable city that actively combats climate change. Particularly innovative concepts are “green roofs” and urban gardens, which ensure better air quality and a more pleasant urban environment.

Similarities and differences

All four countries share the goal of making cities more efficient and sustainable. While Germany and Italy have a strong focus on digital administration and smart infrastructure, the focus in Poland is on pragmatic, cost-efficient solutions. Spain stands out with its consistent focus on climate neutrality. The smart city strategies show that different approaches are possible - whether through technology, sustainability or infrastructure projects. Smart cities are not just a vision of the future, they are already a reality. Europe is proving that intelligent urban development can be diverse and adapted to national circumstances. The cities of tomorrow are digitally networked, ecologically sustainable and geared towards the needs of their citizens.

Partners

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Abtei Gymnasium Brauweiler, Germany

Fondazione AEM, Italy

Istituto San Giuseppe, Italy

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