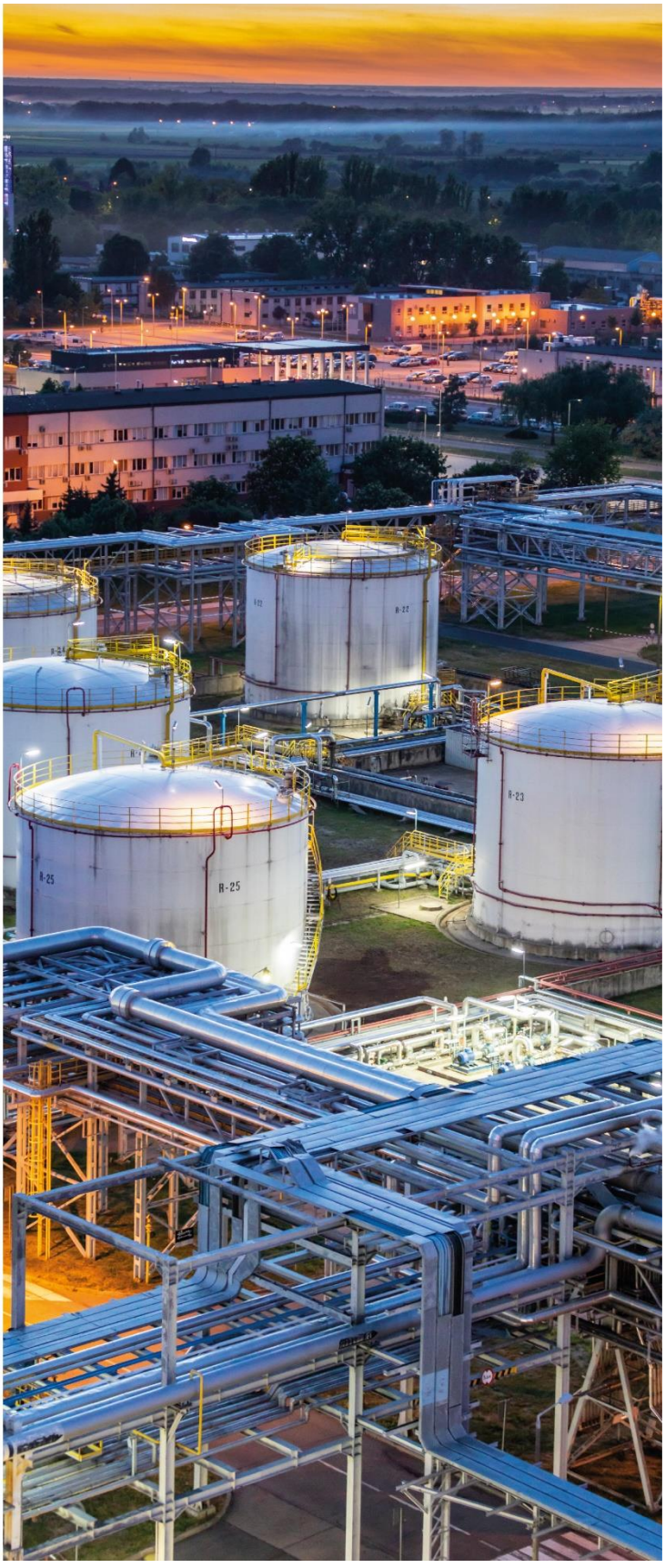
New **Olefins** Complex in Płock

Non – technical summary



January 2023

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WHAT IS THE OLEFINS III PROJECT IN PŁOCK

ORLEN S.A. ("ORLEN") is planning to carry out a project named "Construction of Olefins Complex III on the premises of ORLEN S.A. in Płock " (hereinafter referred to as the Project). The purpose of the Project is to increase the production capacity of the Production Plant in Płock. The investment is a response to the growing demand for synthetics on the European market.

All planned equipment and facilities will be located on land owned and operated by the ORLEN Group, adjacent to and within the existing Production Plant in Płock.

According to the assessment presented in the EIA Report [1], the installation will not cause an adverse impact on the environment, health and safety of local communities. The project will also not have a negative impact on legally protected and valuable areas of high biodiversity - such areas do not occur in the area of influence of the planned investment.

In accordance with the Environmental Protection Law (Journal of Laws 2001, No. 62, item 627, as amended), the technology used in the newly renovated installations should meet the requirements set out in Article 143 of the aforementioned law. Therefore, the project uses substances with the lowest possible hazard potential, and the technology itself is one of the most modern in the world.

The innovative design solutions used enable the efficient use of energy and water and the appropriate management of waste, raw materials and the minimisation of emissions into the environment. This will ensure that the existing environmental balance is maintained and that applicable international and national standards are met.

The Project will be implemented with all necessary measures to ensure a safe working environment for all employees. The Labour Code and the Integrated Management System will set the framework for training and detailed health and safety instructions for workplaces.

The Project includes the construction of the following facilities:

1. Construction of a new main Ethylene Plant for the production of olefins by the steam cracking process (Steam Cracker/SC);
2. The construction of installations cooperating with the main installation (so-called peripheral installations):
    - Installation of Ether (ETBE);
    - Styrene Extraction (SE) plant;
    - Pyrolysis Gasoline Hydrogenation Plant (PGH I/II);
    - Ethylene Oxide and Glycol III (EO/EG) plant.
3. Infrastructure construction:
    - substation, control room and administration buildings;
    - condensate treatment units (CTUs);
    - utilities / ancillary facilities including roads, pavements, car parks;
    - interconnections;
    - circulating water cooling units;
        - fuel combustion plants (EC II);
        - power distribution system;
        - control and data transmission system;
        - underground networks.

[1] EIA Report

In addition, the planned Project includes associated installations and systems:

1. Water installations:
   - Raw water intake and transport system;
   - Decarbonised water production plant;
   - Sedimentation plant;
   - Process water production installation;
   - Cooling water production installation;
   - Drinking water production installation;
   - Domestic water production installation;
   - Fire water production installation.
2. Steam, condensate, water treatment:
   - water demineralisation station
   - condensate treatment plant;
   - mixing and de-gassing node for demineralised water.
3. Technical gases;
4. Torch system;
5. Infrastructure:
   - electrical substations and switchboard rooms;
   - power distribution systems
   - control and data transmission systems;
   - administration building;
   - power distribution; electrical equipment;
   - underground piping / fire protection piping, including the new EC Header collector;
   - main plant power distribution network;
6. Raw material tank park and loading bays;
7. Product tank park and loading bays;
8. Interconnections between facilities:
   - pipelines and overpasses between facilities;
   - roads, pavements and car parks; and fences.

WHO IS THE PROJECT INVESTOR?

The expansion of the Olefins Complex III is a development project that will determine the competitiveness of the Płock Production Plant in the coming decades. It is the largest petrochemical investment in Europe in the last 20 years.

On 12 June 2018, the Company's Management Board approved the ORLEN Petrochemical Development Programme until 2023, which is the basis for updating the Company's strategy in the area of petrochemical asset development. The Olefins Complex III expansion project is the main pillar of the Programme implemented by ORLEN.

On 22 June 2021, ORLEN signed a contract for the construction of the Olefins III plant complex under the EPCC (Engineering, Procurement, Construction and Commissioning) formula with Hyundai Engineering Co., Ltd. based in Seoul and Técnicas Reunidas S.A. based in Madrid.

On 14 May 2021, ORLEN Olefiny Sp. z o.o. was established. ("ORLEN Olefiny") to carry out the business assumptions in the event of positive approval of Project Finance for the Olefiny III Project, and may also apply for Public Aid funding.

LEGAL CONTEXT OF THE PROJECT

EU environmental legislation has been implemented into national legislation through the Environmental Protection Act, the Water Act, the Waste Act, the Act on Providing Environmental Information and Environmental Impact Assessments, the Nature Conservation Act and other acts.

The implementation of industrial projects in Poland takes place in several stages (the design stage and other related work are not included):

- If the existing local spatial development plan (an act of local law that defines the conditions and restrictions on spatial planning in certain areas) does not allow for a certain type of project, then amendments must be made to such a plan to allow for its implementation. Without appropriate amendments, it is not possible to implement the project.

  The areas covered by the planned project are closed areas for reasons of national defence and security as determined by the Minister of Energy.

  According to Article 14 (6) of the Act of 27 March 2003 on spatial planning and development (consolidated text: Journal of Laws of 2021, item 741), a local plan shall not be drawn up for closed areas, with the exception of closed areas established by the minister competent for transport. However, it follows from the disposition of Article 4 (3) of the said Act that with respect to closed areas, only the boundaries of such areas and the boundaries of their protection zones are specified in the local spatial development plan, and in the protection zones restrictions on development and use of the areas are specified, including the prohibition of development. The aforementioned provisions apply to the project areas located within the territory of the Municipality of Stara Biała.

  Part of the installation will also be located in Plock on the site of an existing plant within the city of Plock. This area is also a closed area, but so far the provisions of the Local Spatial Development Plan have not been changed. According to the provisions of the Local Spatial Development Plan, the functional zone of PP-RP - "refinery-petrochemical production", PP-O (production service) and PP-S (storage and warehousing) has been established.

  In the case of a local spatial development plan in the municipality of Stara Biała (no plan in place), the project requires an individual decision on land development conditions, which is issued in this case by the governor.

- For projects for which an environmental impact assessment is mandatory or may be required at the discretion of the authorities (a list of such projects is given in a decree of the Minister of the Environment; this list is in line with EU EIA regulations), an environmental impact assessment procedure is carried out, which culminates in the issuance of an environmental decision (decision on environmental conditions, which, among other things, specifies the requirements that must be taken into account in construction projects and other environmental conditions for the project).
- On the basis of the construction design, which is assessed by the architectural and construction administration authorities, i.a. in terms of its compliance with the environmental decision, a building permit is issued based on the application submitted by the investor. The investor decides whether the project will be implemented in stages and whether the decision on environmental conditions is to cover the entire project or only part of it. Since November 2008, in certain circumstances, such as in the case of a project's non-compliance with the decision on environmental conditions, i.e. the

likelihood of causing a more adverse impact than determined at the environmental impact assessment stage, the competent authorities may request a reassessment.

- At the request of the developer, an issued building permit may be amended, but any application for such an amendment is subject to an assessment of compliance with the building law, the environmental decision and other acts.

The decision on the environmental conditions of the project is attached to the application for a construction permit. In the course of the procedure, the authorities of the architectural-construction administration verify whether the technological solutions comply with the provisions of the environmental decision. Conducting such a procedure guarantees that the implemented projects do not have a negative impact on the environment and human health.

For projects covered by the provisions of the IED (EU Industrial Emissions Directive), the procedures in Poland also require that an assessment of compliance with the Directive is carried out twice, if applicable, as well as with the relevant BAT (Best Available Techniques) Conclusions and BREF (BAT Reference Documents). The first time the assessment is carried out is at the environmental impact assessment stage. The Act requires a mandatory assessment of the planned technology against a low-carbon technology, which for projects covered by the requirements of the IED is equivalent to the BAT and BREF conclusions. In addition, such projects require an appropriate environmental permit, in most cases an integrated permit (IPPC Permit). The application for such a permit contains information about the installation's compliance with the requirements of BAT, i.e. it includes an assessment of compliance with BAT. New projects that do not meet the BREF criteria will not obtain an IPPC permit, so they will not gain an operating permit.

The above-mentioned procedures ensure that, in the case of large technological investments, the best technologies available in the world at the time are used, ensuring minimal impact on the environment and no negative impact on human health.

The OLEFINY III project has all the environmental decisions and permits required by national law, on the basis of which the project is implemented.

PROJECT LOCATION

The Project will be carried out in the Mazowieckie Voivodship, in the administrative district of Płock, in the municipality of Stara Biała and the city of Płock. The owner of the real estate included in the investment is ORLEN. The land designated for the Project, located in the Stara Biała commune, has not yet been used by ORLEN for investment purposes.

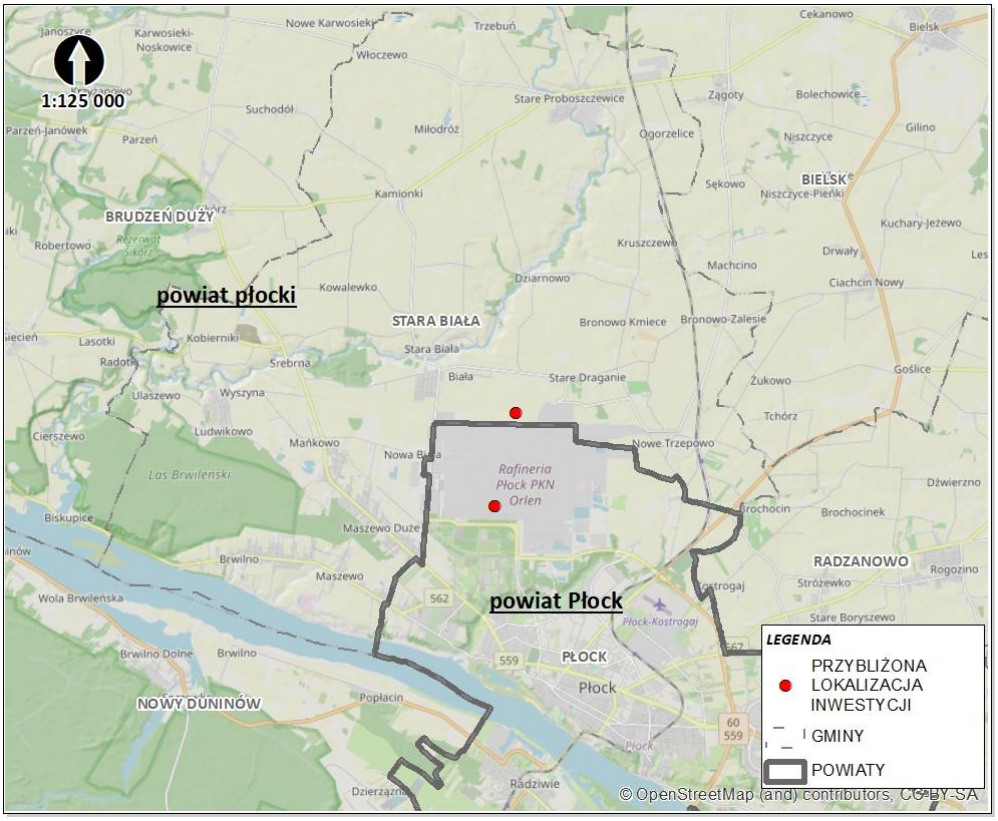

Figure 1 Location of the project

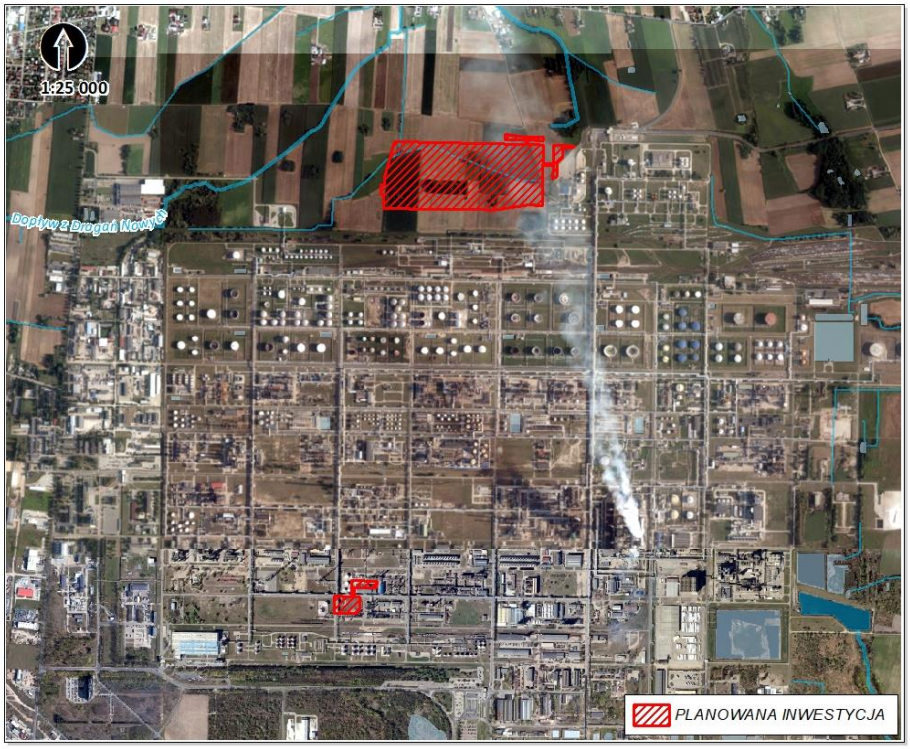

Figure 2 Location of the project - orthophotomap (new facilities and upgrades to existing facilities in various locations)

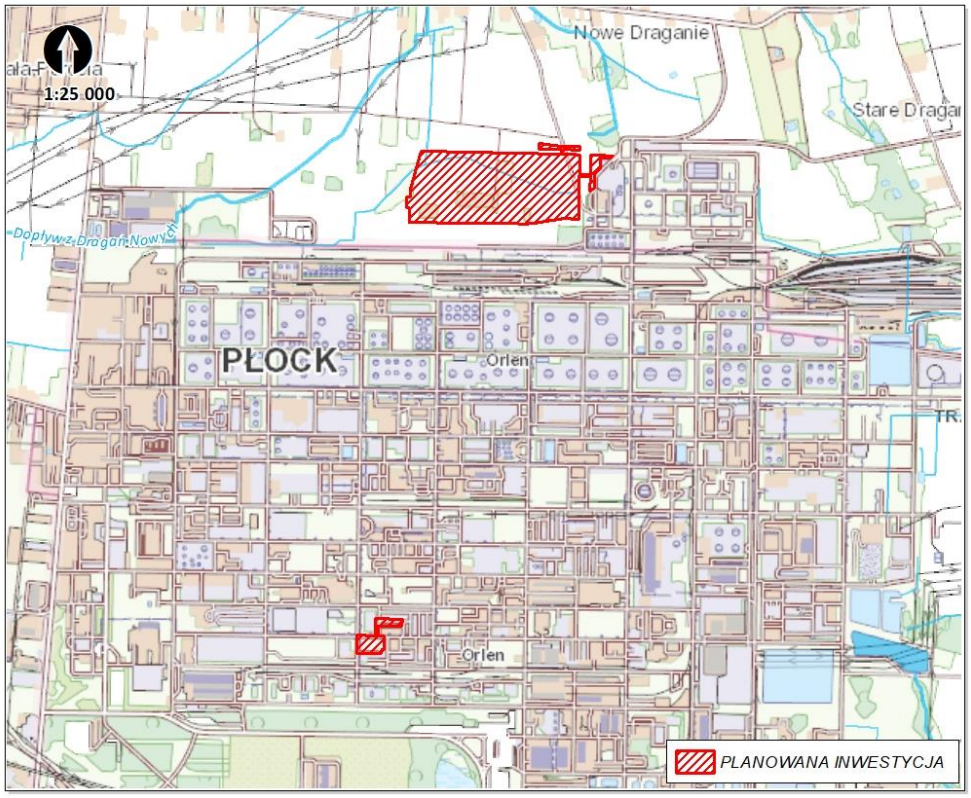

Figure 3 Location of the project - topographic map (new facilities and upgrades to existing facilities in different locations)

HOW WILL THE PROJECT AFFECT THE ENVIRONMENT?

The environmental impact during the construction, operation and decommissioning phases was comprehensively analysed in the Environmental Impact Assessment reports prepared by Multiconsult Polska sp. z o.o.

The planned Olefins Complex III will not have a negative impact on Natura 2000 sites. In addition, field studies, nature inventories, simulations and analysis have shown that the infrastructure will not disrupt ecological corridors and will not affect terrestrial or aquatic ecosystems.

The selection of the optimum production technology and location of facilities for the project under consideration was based on the best available and currently proven technical issues, safety issues (particularly relevant in the chemical industry) and environmental issues (mainly related to energy intensity, efficient use of materials, waste management, air emissions and noise emissions). The proposed locations were also analysed for their potential impact on protected areas.

The environmental analyses of the various options and alternatives were conducted in an equal and comparable manner.

In analysing and formulating the options, aspects relating to:

- the choice and safety of the technology,
- the location of the project,
- the environmental impact of the project,
- the rational use of environmental resources, the impact of the product and organisational aspects related to the implementation of the project.

A key issue for the production facilities was the selection of optimal production technologies in terms of their environmental impact and energy intensity.

The available technologies were also analysed in terms of their technological and economic efficiency. The basis for selection was a comparative market, environmental, technical and economic analysis. As a result, the technology that best meets the business, technical and environmental objectives set by the contracting authority for the project was adopted.

In terms of the location of the overall investment, undeveloped land belonging to an existing plant (ORLEN) was a natural choice. Such a location provides:

- no need to occupy non-industrial sites,
- access to infrastructure to ensure more efficient use of utilities,
- access to services and qualified personnel of chemical plants,
- use of previously unused land located within the industrial development zone.

The selected site meets the following criteria:

- no urban development or public transport facilities nearby,
- space is available to maintain safety zones,
- the site uses land owned by ORLEN, being a kind of extension of the already existing infrastructure.

Impact on fauna, flora, fungi and natural habitats

Comprehensive nature inventories and environmental studies have been carried out for the planned project. The Environmental Impact Report does not identify any significant and irreversible impact on Natura 2000 areas or other valuable natural areas under various forms of protection, or on the species of fauna and flora present there, but confirms the low impact of the Project on habitats, flora and fauna.

The Project will also not pose a significant threat to priority biodiversity features, particularly those protected in Natura 2000 sites due to their distance.

As a result of the nature inventory and impact analysis carried out in the area covered by the planned project and within the adopted 100-metre analysis buffer, no impacts were identified:

- the protected habitats of Annex I of Habitats Directive 92/43/EEC,
- protected plant species from Annex II to Habitats Directive 92/43/EEC,
- protected plant species included in accordance with the Ordinance of the Minister of the Environment of 9 October 2014 on the protection of plant species (Journal of Laws of 2014, item 1409),
- protected species of fungi and lichens listed in the Regulation of the Minister of Environment of 9 October 2014 on protected species of wild mushrooms (Journal of Laws of 2014, item 1408),
- protected species of fish and lampreys, mammals and bats listed in the Regulation of the Minister of Environment of 9 October 2014 on species of wild animals.

Among protected animal species inventoried:

- representatives of the green frogs (Rana esculenta complex),
- 6 bird species listed in Annex I of the Birds Directive, of which 1 nesting species, 2 species probably nesting and 3 species in flight. The nesting species is the peregrine falcon, which has inhabited nest boxes on the chimneys of two existing installations for several years.

Impact on Natura 2000 areas, other protected areas and sites and on ecological corridors

There are no areas or objects protected under the Nature Conservation Act within the area of the planned project and the adopted buffer of potential impact. Furthermore, there are no Natura 2000 sites, National Parks, Landscape Parks, Protected Landscape Areas, Nature Reserves, Documentation sites or Ecological Uses within 2 km of the planned project.

However, in close proximity to 1km are:

- 1 Nature and Landscape Complex - Brzeźnica River Jar,
- 3 monuments of animated nature - a cluster of trees of the small-leaved linden species Tilia cordata.

Closest to the project, at a distance of less than 4 km to the south, runs parallel the main migration corridor GKPnC-10B Lower Vistula Valley. At a distance of more than 5 km to the west, runs the corridor GKPnC-13A, connecting the Vistula Valley with the Lidzbark Forests in a meridional direction. A local migration route is the Brzeźnica River valley located less than 2 km from the nearest part of the project.

Due to its location, long distance and spatial development in the form of dense urban and suburban development in Płock, the implemented investment will not have a negative impact on legally protected areas and objects, as well as animal movements within ecological corridors and local migration routes.

Impact on water and wastewater management and protection of surface and groundwater

During the construction phase of the facility, there will be a demand for water for domestic and technological purposes, including but not limited to wetting of concrete during setting, housekeeping activities and fire-fighting purposes.

The wastewater generated during the implementation phase will be managed in a way that is safe for surface water, therefore no significant impact of the planned project on surface water and on the achievement of environmental objectives defined for surface water bodies (SWB) is expected - all types of wastewater generated will be discharged into the on-site sewer system or into non-drainage tanks.

Implementation of the Project will result in temporary interference with the near-surface soil and ground layer. For the foundation, shallow open foundation pits and piles drilled using the CFA technology (piles are drilled and concreted in one continuous process) will be constructed. The foundation techniques used will not cause significant changes to the geological and engineering conditions. In addition, the materials used during earthworks and foundation works will have the appropriate approvals and certificates. On the other hand, the following may pose a threat to the soil and water environment (soil and groundwater quality): fuel and lubricants of the working machinery and chemical materials used for insulation or maintenance of the facilities, which due to improper organisation of the works (or occurrence of emergency situations) may seep into the ground, and consequently into the groundwater. To minimise such a potential impact, suitable sorbents will be available on site to bind oil-based contaminants. The risk of potential contamination may possibly relate to the water of the near-surface aquifer, where the water level is closely related to atmospheric conditions and is practically not isolated from the surface by impermeable soils.

The technical solutions adopted in terms of sealing and materials will allow compliance with the applicable standards for protection of the soil and water environment. Conducting the works

in accordance with applicable regulations and standards, under constant geotechnical supervision, will ensure that the works carried out will not pose a threat to the ground and water environment. As part of site preparation for the construction, the ditches running through the project area will be removed. The function of the ditches will be replaced by the designed drainage system.

During the operation phase, water will be drawn from existing underground and surface intakes and supplied to the installation via the existing water supply network. With regard to the planned investment, the largest water demand is estimated for the cooling water installation supplied with supplementary water produced at the Decarbonised Water Installation. The second significant water consumer will be the Olefins Complex III, (including the Fuel Combustion Plant - EC II), which will be supplied with demineralised water from the new Demineralisation Station (excess demand over the production capacity of the new Water Demineralisation Station will be supplemented with treated condensate). The new Water Demineralisation Station will be supplied with water produced at the Decarbonised Water Plant. The Condensate Treatment Station will be upgraded and expanded.

Water will also be supplied for welfare purposes, for equipment required by health and safety regulations, i.e. eye and safety showers, as well as for fire installations. A fire water reservoir at the new fire pumping station and the expansion and modernisation of the existing fire pumping stations are also planned.

Operation of the Project will result in the following types of wastewater: domestic, industrial, saline, rainwater, snowmelt and firefighting.

Domestic wastewater will be directed to the existing sewer system and will be connected to the industrial wastewater system.

Industrial wastewater requiring treatment will be retained and sent to the industrial wastewater system and further to the Central Wastewater Treatment Plant of the ORLEN Production Plant. Wastewater possible for further use will be retained separately.

Rainwater will be collected from the area of the planned project in a retention tank, divided into two chambers in order to separate clean and potentially polluted rainwater. The rainwater retention tank will be emptied periodically using a hydrocarbon separator. This operation will be preceded by laboratory analysis of samples taken from the retention tanks to confirm their chemical purity.

The post-fire water from firefighting actions, which will end up in trays under equipment, roads or other hardened areas, will be directed to the rainwater retention reservoir and then to the Orlen Central Wastewater Treatment Plant.

In relation to the construction of the Olefins Complex III and related investments, ORLEN will carry out investments relating to the modernisation of the Central Wastewater Treatment Plant related to: expanding its hydraulic capacity and ensuring a high degree of wastewater treatment, as well as aiming to reduce emissions of odorous compounds. Investments are also planned to increase the secondary use of treated wastewater to produce water for the Production Plant.

The adopted technological solutions in the field of water and sewage management minimise the possible negative impact of the implemented Olefiny III investment on both surface and groundwater.

Impact on soil and ground surface, including earth movements

The implementation of the Project will result in the transformation of the land surface. As part of the preparatory works preceding the implementation stage of the project, land leveling will be carried out, as well as a palisade along the southern boundary of the project to support the earth embankment.

The planned investment in terms of its impact on soil and the ground surface will be connected only with moving earth masses, and the adopted preventive measures will reduce the impact on soil to a negligible level.

Impact on the landscape

The Project will be characterised by localised landscape impacts. Short-term impacts during the implementation/ decommissioning phase will be associated with construction/demolition works. The planned works will not affect the deterioration of landscape values. The impact of the investment on the landscape at the stage of implementation is assessed to be negligible. Also in the exploitation phase, the planned investment will not have a negative impact on the landscape due to the industrial character of the investment's surroundings and the lack of valuable landscape assets.

Impact on material goods, including monuments

Due to the considerable distance from the investment of valuable material goods, historic buildings and areas, no negative impact is expected in this respect.

Thus, for the investment in question, there is no need to apply additional recommendations relevant to the protection of buildings and objects and areas of cultural heritage.

Impact on air quality

The source of air pollutant emissions at the construction stage will be machines and heavy vehicles used for construction works, as well as transported earth, sand and cement. The amount of pollutant emissions will depend on the meteorological conditions and the phase of the task implementation. Emissions will be temporary and will not cause permanent negative changes in the environment.

In the operation phase, the source of emission of pollutants into the air will be technological processes related mainly to the combustion of gaseous fuels during production processes and during energy generation. The designed installations will be equipped with technological solutions to reduce emissions to a level compliant with national and Community (European) legal requirements. The impact of the planned project on air quality at the operation stage was determined by modeling the spread of pollutants in the air, which in the cumulative approach (taking into account the existing installations) showed that the operation of the Project will not exceed the ambient air quality standards.

Acoustic impact

The impact of the planned investment on the acoustic environment, both at the construction and decommissioning stages, will be temporary, limited to working hours.

The impact of the planned investment at the operation stage was determined by modeling noise propagation, which in the cumulative approach (taking into account existing installations) showed that the operation of the Project will not exceed noise standards in acoustically protected areas.

Waste management

Sources of waste during the construction phase will be earthworks, construction of facilities and installations and finishing works. Waste will be generated by construction companies responsible for managing this waste. In accordance with the principles set out in Article 16 of the Waste Act, waste management will be carried out in a manner that ensures the protection of human life and health and the environment. The construction design and then the proper organisation of the operation of the installation will enable operators to carry out the management in such a way that it does not cause danger to water, air, soil, plants or animals and nuisance through noise or odour. Waste management will be dealt with in the BIOZ (Health and Safety Protection Plan) document, where the principles of both storage and further management of waste generated within the construction site will be defined.

Waste sources at the operational stage will be:

- operation of the ethylene plant and related chemical installations,
- operation of EC II,
- operation of logistics facilities and infrastructure,
- water and wastewater infrastructure,
- maintenance and operation of storage facilities, tanks and loading facilities,
- electrical facilities,
- office facilities,
- maintenance and operation of gas distribution and flare infrastructure,
- maintenance of pipelines, flyovers, fire-fighting installations,
- operation of welfare facilities,
- grounds maintenance,
- periodic maintenance and upgrades.

The waste to be generated during the operation phase is typical chemical process waste that is already generated at other installations at Orlen. Therefore, the market of eligible recipients is known. The principles of waste management from the installation will be consistent with those of the existing plant and will be based on the principles of the waste hierarchy. The company will minimise the transfer of waste to landfill.

The operation of the installation will generate hazardous and non-hazardous waste. The technologies under consideration are considered so-called low-waste technologies. It is anticipated that the amount of waste will not exceed 10% of the production volume, which is a typical indicator for this type of technology. The management of waste generated by the new investment will be carried out within a special purpose company, which will be the operator. The company will obtain an integrated permit for the use of the environment, including the generation of waste.

Waste management will consist in the control of waste generation, organisational measures involving the safe removal of used substances from production equipment, the organisation of a safe storage area including segregation. Furthermore, management will consist in supervising the correctness of activities such as transport, recovery and disposal, which will be carried out by specialised external companies with the relevant and valid permits.

The planned technology does not provide for the possibility of waste recovery and processing. Therefore, all waste processing operations will be carried out by specialised external companies, independent of ORLEN, or within installations operating in the ORLEN Capital Group, which are prepared for such operations.

Electromagnetic radiation

The scope of the planned Project also includes the upgrading of the existing electricity infrastructure.

During the construction phase, the use of equipment causing electromagnetic emissions into the environment of an intensity likely to cause significant effects is not anticipated. The only impacts will be limited to ground works and preparation of excavations for underground lines. These impacts will be eminently short-lived and insignificant, and in the case of implementation of an underground line by drilling, the impact at the construction stage will be minimal.

During the operation phase, the intensity of electromagnetic fields in areas accessible to people will also not exceed limit values.

Impact on climate

In terms of climate impact, the investment under consideration is an investment of local significance. Its scale, location and size will not significantly affect the climate and its changes. The design solutions of the planned project will take into account optimal adaptation to progressive climate change in order to protect against the effects of extreme events (heat waves, prolonged droughts, extreme precipitation, flooding, violent storms and winds, cold waves or intense snowfall).

WILL THE PROJECT HAVE AN IMPACT ON THE SOCIAL ENVIRONMENT?

The impact of the Project can be seen as an opportunity for the development of the Stara Biała commune, increasing its income and employment opportunities, improving living standards, reducing migration from this part of Poland, and supporting local field research, higher education and vocational training. As a result of the Project's implementation, Poland's economic importance in the international arena will increase, as well as an opportunity to increase revenues to the commune's budget from local taxes, development of local businesses, emergence of new industries, reduction of social expenditures, construction of new infrastructure and increase of state revenues from various taxes. On the other hand, possible negative impacts include emissions of pollutants and potential impacts on the health of local residents, as well as an increased level of risk associated with industrial accidents.

Impacts during the construction phase

During the construction phase of the Project, social impacts will be largely related to increased traffic in the municipality of Stara Biała due to transport of materials, equipment, construction machinery, soil and workers. At this stage, traffic in the vicinity of the construction site, mainly in the village of Biała on Sienkiewicza Street, but also on local roads in the area, will be much more intensive than at present and after the completion of the construction works. This increase in traffic will have a negative impact on the community due to:

- noise emissions;
- primary (from fuel combustion) and secondary (e.g. road dust emissions from heavy goods and passenger vehicle traffic) air emissions;
- increased risk of road accidents;
- inconvenience to road users due to increased traffic volumes and oversized freight transport;
- the potential for damage to roads due to high volumes of heavy transport.

Impacts during the operational phase

Potential social impacts during the operational phase may include:

- direct impacts, such as emission of gases and dust into the air from the installation, from vehicles moving on the site, vehicles transporting raw materials and products, emission of noise and vibration generated during the operation of the installation and the passage of vehicles, emission of electromagnetic fields, emission of noxious odours, lighting effects (flare), possibility of collision, danger associated with emergency situations;
- indirect impacts, such as the possibility of contamination of the ground and surface and underground waters.

At the operational stage, nuisance related to vehicle traffic will be significantly lower than during the construction phase.

As shown in the EIA Report, all planned organisational and technical measures minimise the occurrence of possible adverse effects on the social environment.

The exploitation phase will potentially have a positive impact on the local economy due to:

- opportunities for the development of the municipality and the city;
- an increase in income for the municipality and the town;
- an increase in employment opportunities;
- improvement in the standard of living and general well-being of the population;
- reduced migration from this part of Poland;
- support for local field research, higher and vocational education;
- an increase in the importance of the Polish economy on the international arena;
- a development opportunity for local businesses.

Analysis of possible social conflicts associated with the planned project

The implementation of the Project does not involve the need for expropriation, nor does it affect the possibility of developing neighbouring areas. The undertaking ensures the development of the Production Plant in Płock and the Municipality of Stara Biała, providing good working conditions for the inhabitants of the region.

However, the planned Project may cause subjective concerns related to deterioration of living conditions, condition of the environment or negative impact on material assets. Therefore, ORLEN is conducting appropriate information activities along with making some of the documents public. In addition, a public grievance mechanism has been launched.

Impact in the case of a major industrial accident

The main substances affecting the safety of the Olefins Complex III are ethylene, ETBE ether, propane and C4 hydrocarbons, propylene and other olefins, ethylene oxide, pyrolysis gasoline and hydrogen. There are also other hydrocarbons present in the planned installation (among its raw materials or products), but they are present in smaller quantities.

The risk of a major accident arises from the possibility of a leak in the installation and the release of dangerous substances involved in the process. This unsealing can be caused by a sudden rupture of the process equipment (e.g.: as a result of a material defect) or be the result of a sequence of events in which process deviations, such as an increase in pressure or temperature, lead to a weakening of the mechanical strength of the structural materials.

Installations where leakage and leakage of hazardous substances may occur will be located in designated areas. The locations of potential leakage sites will be determined by analysing the layout of tanks and pipelines, and taking into account process parameters and the types and quantities of hazardous substances in the equipment.

Consideration will also be given to the division of the installation into sections formed by individual or groups - each section, in the event of a failure, will be isolated from the directly connected parts of the installation by the operation of isolation valves. In the event of a leak in a given section, regardless of where it occurs, the amount of substance released will be similar, causing the same effects (minor, not resulting in an explosion, but only a localised fire). The detailed design for the planned installations will be carried out to minimise the amount of substance released, so that there will be no spatial explosion, but at most a small local fire.

In addition, all key structures will have fire protection to allow for a minimum of 60 minutes of endurance in the event of a fire - precisely to protect the structures of these installations and other equipment.

Potential emergency scenarios will be detailed for each installation.

An important facility, for safety reasons in the area of auxiliary installations, is the gas flare. The purpose of the flare (during normal plant operation) is to safely 'burn' the substances discharged through the safety valves. The highest impact of the flare may occur during an emergency gas discharge to the flare due to an electrical power failure across the plant. This is a scenario where the flare is important to the overall safety of the new Olefins Complex III.

Potential for transboundary environmental impacts

Due to the location of the project at a distance from the national borders, the height of the air emission emitters and the range of significant impact on the surroundings (closed within the borders of the area to which the Investor holds the legal title), there is no possibility of a negative transboundary impact.

GRIEVANCE MECHANISM

A grievance mechanism has been set up for the Project whereby any person or organisation can lodge a complaint about any aspect of the Project. Further details can be found in the Stakeholder Engagement Plan, which is available on the Olefins Complex Expansion Project website

Basic information on the operation of the grievance mechanism:

- Any grievance from any external party or employee regarding any stage of the Project will be formally recorded as soon as it is received on the Contact Form:
- https://formularzolefiny.orlen.pl/?lang=pl.
  Grievances can be reported anonymously.
- A grievance or application shall be dealt with within 30 working days from the date of receipt. Particularly complicated cases may be considered no later than within 2 months from the initiation of the investigation.
- Complaints will be investigated until satisfactory resolution by the Olefins Intensification Office or the relevant substantive area within ORLEN. All actions will be recorded on the complaint form until ORLEN has completed contact with the complainant.
- The contact will then be recorded in the Complaints Register as closed.

The grievance mechanism is free, open and accessible to all and complaints will be dealt with in a fair and transparent manner. Information on the complaints process, who to contact and how to contact them is available on the Project website (Olefins Complex Expansion).

Information on the grievance mechanism and contact details will be posted on employee information boards and on site and construction information boards and will be published in Project documents (leaflets, newsletters, public notices, etc.).

All workers will be informed about the grievance mechanism and new workers will be informed about it when they join the Project. The Olefins Intensification Office at ORLEN will have overall responsibility for the grievance mechanism throughout the duration of the Project and will ensure that external stakeholders and employees are aware of the process and that all complaints are dealt with promptly and responses are provided in a timely manner. The representative of the Olefins Intensification Office who handles complaints may delegate the handling of the case to the relevant persons in ORLEN's organisational units, coordinating the whole process.

ORLEN will continue to involve stakeholders at subsequent stages and the procedures for comments and complaints that operated during the EIA consultation will remain in place. Future plans for further stakeholder engagement and procedures for managing complaints and submissions are described in the Project Stakeholder Engagement Plan. This is a document that will be updated as necessary during construction and the most up-to-date version will be available on the Project website, along with the Environmental and Social Management Plan, at: https://www.orlen.pl/pl/o-firmie/kluczowe-projekty/olefiny Other Project information, construction submissions and reports will continue to be available during construction and operation of the Project.

HOW CAN I FIND OUT MORE ABOUT THE PROJECT?

A Complaints Handling Manual (attached as Appendix 1 to the Stakeholder Engagement Plan) has been put in place to ensure that all notices, questions and complaints - particularly those from persons representing the local community who may find the Project onerous - are responded to. All non-confidential information about the environment or its protection will be provided upon written request by the interested party without undue delay, but no later than one month after receipt of such a request. If the request concerns a complex matter, this time limit may be extended by one month. In such a case, the applicant will be informed of the extension. The provision of information on the environment or its protection may be refused if the response requires access to data currently being processed or data transferred through an internal data flow system or if the request for information is too vague or impossible to comply with.

CAN I NOW GIVE MY OPINION ON THE PROJECT?

Yes, any feedback on the Project can be provided throughout the life of the Project.

WHO SHOULD BE CONTACTED TO GIVE AN OPINION OR FOR MORE INFORMATION?

Any comments and/or feedback should be addressed to:

ORLEN S.A. Olefins Production Intensification Office.

Chemików 7 Street

09-411 Płock;

E-mail: olefiny.zgloszenie@orlen.pl

Questions and complaints regarding the expansion of the Olefins Complex can be submitted using the form on the project website: https://formularzolefiny.orlen.pl/?lang=pl.

Hotline (24) 365 44 99 Company Environmental Inspectorate

APPENDIX 1.

REVIEW OF SELECTED ENVIRONMENTAL AND SOCIAL DOCUMENTATION

Impact/issue	Mitigation measure	Status
Social issues		
External and internal complaints	Stakeholder engagement plan	Implemented
Health and safety	Health and Safety Documentation	Developed
Human rights	Human Right Impact Assessment	Developed
Społeczeństwo	Social Impact Assessment	Developed
Environment and biodiversity		
Soils	Action Soil Plan	Developed
Air	Action Plan for Emissions and Odours, Project Standard	Developed
Landscape	Lanscape Impact Assessment	Developed
Biodiversity	Biodiversity Impact Assessment	Developed
Water/Wastewater	Water and sewage management, Project Standard	Developed
Environment as a complex	Environmental Impact Assessment Report	Developed