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INTERVIEW WITH WOJCIECH LUBAWSKI,
MAYOR OF KIELCE

SKYE OR THE KIELCE PARADISE FOR IT INDUSTRY.
THE INCUBATOR IS WAITING FOR TENANTS

THE JOURNEY TO ANOTHER WORLD.
A VISIT TO THE ENERGY SCIENCE CENTER



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THE PARK DRIVEN BY PASSION

Ladies and gentlemen,
Dear Readers!

With great joy we give in your hands another issue of Kielce Technology Park's magazine. This edition is special to me because it is the culmination of the efforts of many wonderful people who have contributed to the realization of the vision of the development of our institution.

It is not only my impression but I am sure that we entered the fast track of development, which allows us to walk towards a mature and professional business support institution. I have no doubt that what we are doing, among others, construction of new infrastructure, creation of research-development facilities and the Energy Science Center begins to set new trends in the development of instruments to support and develop entrepreneurship.

This new, creative and extraordinary environment is becoming a source of pleasure for many young people who are planning their business adventure. I have a feeling that for some time now we have been operating in an environment of companies able to learn from all possible sources - and most importantly most of them have the ability to transform this knowledge into new products and services.

The Park becomes a safe „harbor“ for business, in which young people give away their stern lines to catch the wind in the sails and sail on great waters Have a nice reading!

Szymon Mazurkiewicz
Director, Kielce Technology Park

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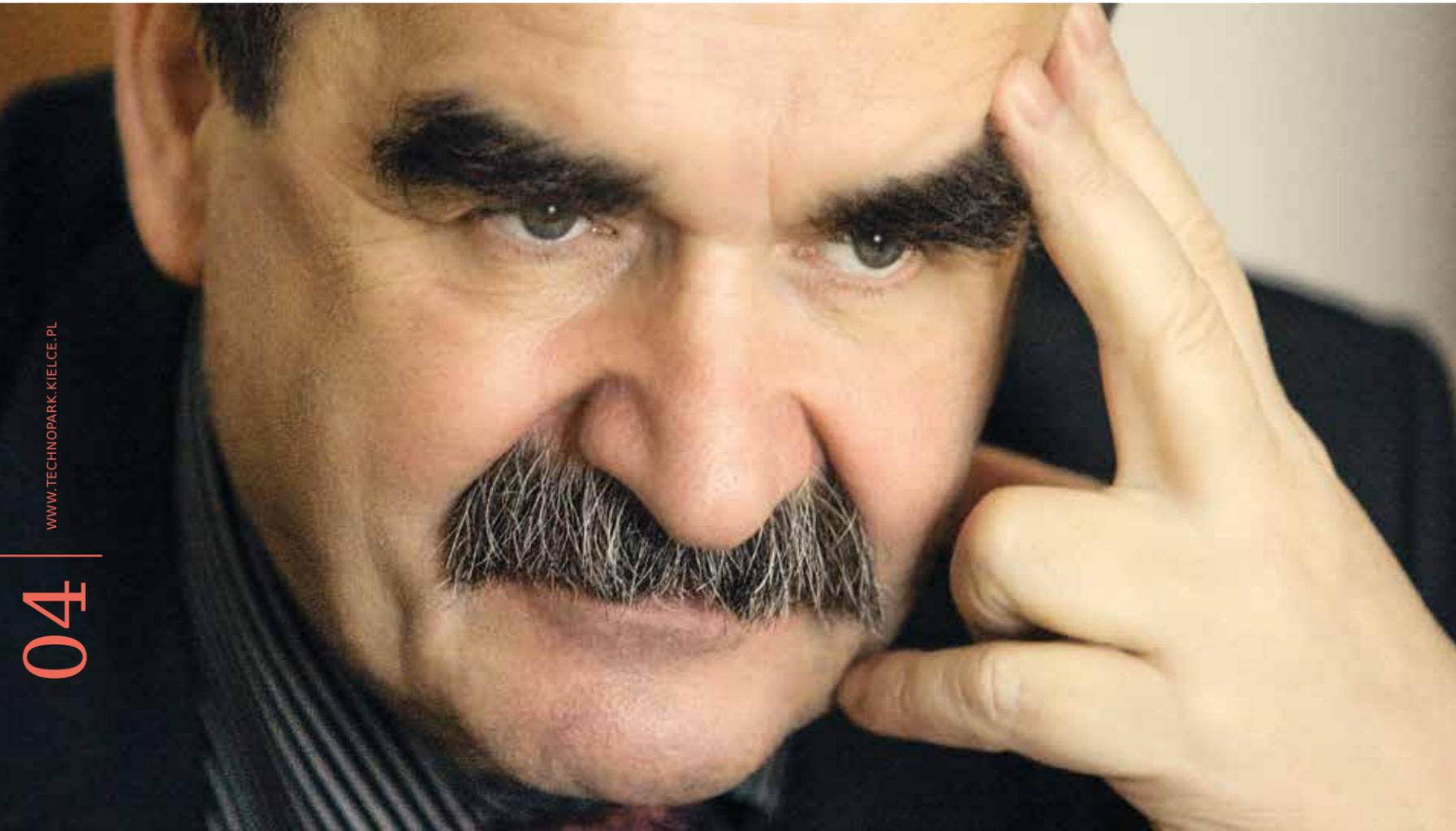
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NEW TECHNOLOGIES ARE THE FUTURE

INTERVIEW WITH WOJCIECH LUBAWSKI,
MAYOR OF KIELCE

The next EU financial perspective has just started. This is an opportunity for us to obtain funds for the development of our city. What projects do the city authorities want to finance with the aid of EU funds?

Wojciech Lubawski – Certainly, the new perspective will be more difficult than the previous one as it carries more restrictions on fundraising. This is why we have chosen several strategic activities that we will prioritize. An important area of our activities will be Kielce Technology Park (KTP). The projects carried out by KTP result in the creation of new workplaces and a well-developed district of the city, which has changed from a neglected place into a thriving business area. Together with Szymon Mazurkiewicz, the director of Kielce Technological Park, we have agreed the vision for the development of the Park, for which we will

be striving. We will certainly not run out of EU funds, however, we will need time to realize all the goals. I wish the Park were a flywheel that drives the development of the entire region. We are particularly keen on attracting new companies to Kielce at the same time supporting local companies that deal with new technologies. We all hope that the entities will work together, making it easier for them to be successful in today's very demanding market. What is crucial for the future of the Park is improving communication, especially the access to the Park from Olszewskiego Street and S7 motorway.

The establishment of the Practical Training and Lifelong Learning Centre is a difficult task. We want to give a chance to young people to be educated in professions that will guarantee employment. Today we know that we are looking for, among others, IT specialists, operators of CNC machines, welders and cooks. Therefore, the center will provide training in these areas. Additionally, university graduates who remain unemployed will have the opportunity to re-train here. For that purpose, funds from just one project will not suffice so we will take advantage of the so-called Integrated Territorial Investment (ITI) Programme as well as the Regional Operational Programme.

This project is particularly important to me. I hope that thanks to it thousands of young people will gain practical skills, find a job here and will contribute to the development of successful and happy Kielce.

Another important issue is the revitalization of housing estates. We have completed the main phase of the revitalization of the downtown, however, within the current financial perspective investments will be of smaller scale. Currently, we are planning to revitalize housing estates. We have to solve several problems. The key one is the need to invest our own funds. A significant amount of money was spent in the previous financial perspective so now we need to find new sources of financing. Of course we are creditworthy, but decisions concerning investments have to be taken responsibly. For most projects, EU subsidy amounts to 85% of the total project's value whereas 15% constitutes the city's own resources. However, we know from experience that it is never just 15 per cent because we always have higher non-eligible costs.

Looking at the previous financial perspective we know that the city's own costs would typically reach 35 percent.

How do you think housing estates should change and what role may residents play in this process?

Kielce's housing estates need changes in the policy for spatial development. Often little money is enough to make the life of residents more attractive. Certainly an important element of the revitalization is the construction of multi-storey car parks. Currently, a significant part of the common urban space is „appropriated” by cars. That is why we want to build a car park in each of the eight residential areas, so as to reclaim the space for the residents and relieve the streets and sidewalks. We are also planning a number of other investments, including the modernization of facilities and streamlining communication. We are happy to see many people involved in the activities to make their place of residence better - their organizational skills and excellent knowledge of the environment are extremely helpful. Changes are not possible without the involvement of residents.

Some housing estates will undergo go smaller transformations, and others – more significant. These differences will not be the result of the city's policy, but of the degree of involvement of residents. For example, the involvement of the residents of Na Stoku housing estate in the revitalization is significant. The residents got together and created numerous development plans. They use human potential in an excellent way. There are architects and city planners living there who work for the estate free of charge. They are a fantastic example to follow.

There is a special unit in the Town Hall dedicated to the introduction of intelligent solutions in the functioning of the city. How does its work change the face of the city?

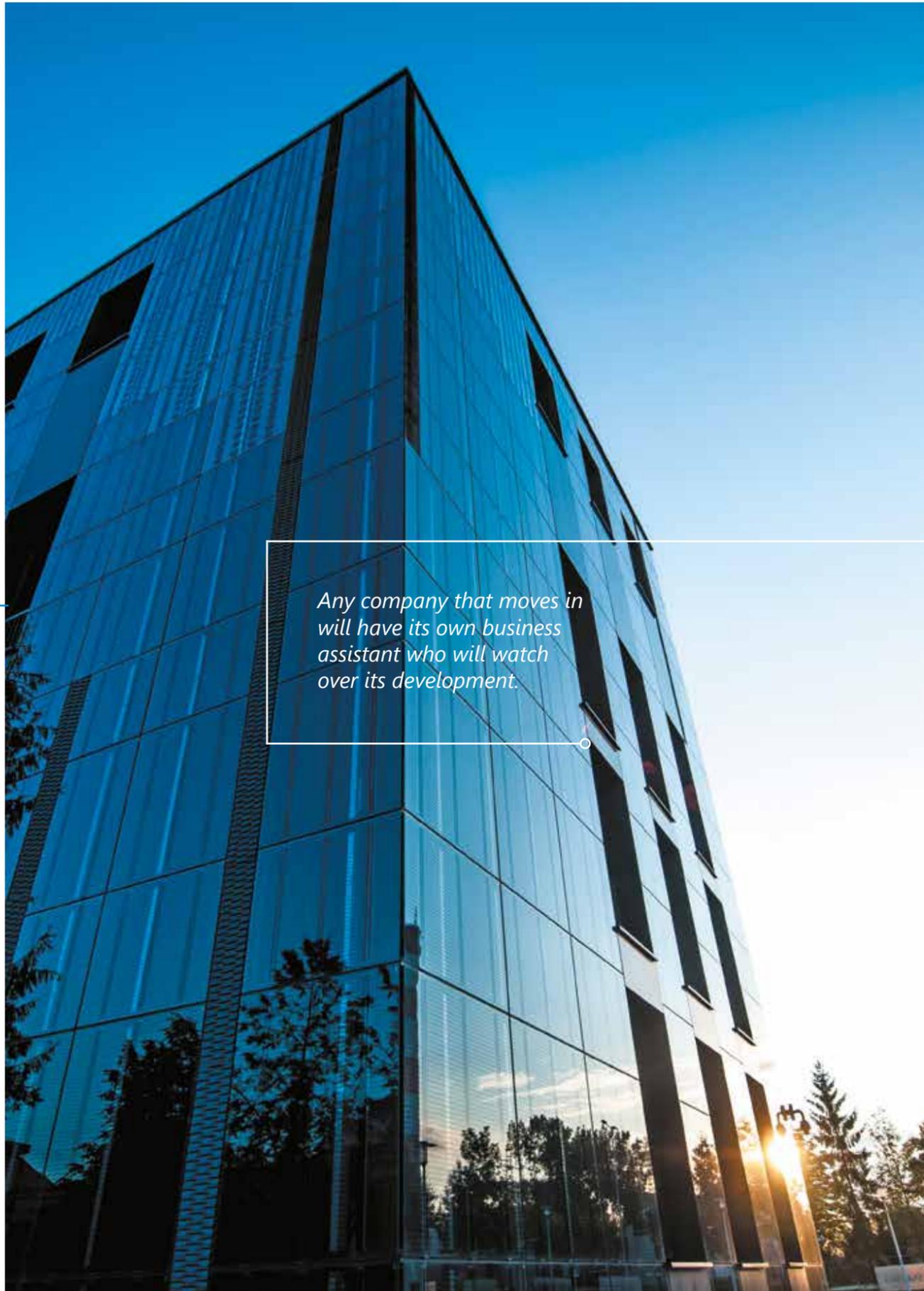
We look at the best, proven solutions that have been developed in other cities, and gradually introduce them in Kielce. This is an inevitable process; now most modern European cities are smart or intelligent places. The purpose of our team is to analyze these solutions and translate them into the our reality. They unit also be involved in raising funds for this purpose. New technologies are the future.

We want to give a chance to young people to be educated in professions that will guarantee employment. Today we know that we are looking for, among others, IT specialists, operators of CNC machines, welders and cooks.

SKYE OR THE KIELCE PARADISE FOR IT INDUSTRY

YOU CAN ONLY DREAM OF SUCH A SPACE TO LOCATE YOUR COMPANY. MODERN DESIGN, FULLY EQUIPPED OFFICES, VERY HIGH REDUCTIONS ON RENTAL LEASES AND FREE ACCESS TO ICT LABORATORIES WITH EQUIPMENT WORTH 5,000,000 ZLOTYS! WHAT MORE COULD YOU ASK FOR?





Any company that moves in will have its own business assistant who will watch over its development.

These conditions are offered to future tenants by newly-built IT Incubators Cluster of Kielce Technology Park, which was established at 6 Olszewskiego Street, in a former office building of Chemar Foundry and the headquarters of the Higher School of Arts and Sciences. "Undoubtedly, we are dealing with the most modern infrastructure in Kielce. It is a building with an area of more than 5 thousand sq. m, office space ranges from 14 to 300 sq. m and is equipped with top-quality equipment", stresses Szymon Mazurkiewicz, director of Kielce Technology Park.

The building is dedicated primarily to companies in the ICT sector and has been designed to suit their needs.

"In addition to the production offices, in the basement of the building we have located the laboratories cluster, which will be made available to tenants completely free of charge. And this is the main advantage of our offer - companies that come to work here will be able to use for free the most modern technological solutions", says Szymon Mazurkiewicz.

What are the laboratories? "We have spent 5 million zlotys on them, which is quite a substantial amount of money, combining them with ICT infrastructure that we have at the headquarters of the Park. With these devices we provide collocation services and highly advanced network services. In addition, we run the CISCO Academy, where tenants will continuously develop their skills and qualifications in the so-called areas of hardware and software. We will also open an innovative laboratory, in which you will be able to create prototypes of mobile applications and test them at one time by a large number of recipients", explains Mazurkiewicz.

And that is not all that Kielce Technological Park tempts IT companies with so as they could start their business operations in or transfer their headquarters to the new Complex of Incubators. The Park offers preferential rental rates (in the first year only 30 percent of the initial price) to start-ups and companies that have operated on

the market for not longer than three years. Additionally, the Park provides its future tenants with a comprehensive package of support through business and development services. Any company that moves in will have its own business assistant who will watch over its development.

In addition, a material library will be opened in the building of the new Complex of Incubators. "In this regard, we have established cooperation with a university from New York, which owns the license for the development of material libraries all over the world. Based on that, for the next three years we will have access to thousands of samples of innovative materials.

It will be an electronic database, where you can go in, take a look at the material, its characteristics and uses, but also explore its potential use.

In addition, several thousands of samples, which could be examined physically, will be shipped to the Park. This will be the only material library of its kind in Poland operating within a network", stresses Szymon Mazurkiewicz.

No wonder that in the first days after the announcement of recruitment to the IT new incubator the interest was huge, and only in the first week 40 percent of the office space of the building was leased. KTP managed to attract Warsaw Transition Technologies SA company, which for almost 25 years has been creating copyright information systems and the most modern technological solutions as well as rendering complex IT services. Transition Technologies SA cooperates with international automotive companies, such as Ferrari, Honda, Continental or Renault, and employs over five hundred programmers in Poland. The company is to occupy the entire third floor of the new KTP Incubator. "This company is of strategic importance to us. First of all, it creates very modern and well-paid jobs for university graduates. Secondly, we hope that new companies will be established to cooperate with Transition Technologies", explains Mazurkiewicz. The new facility of the Park has also tempted entrepreneurs from distant Brazil,



/ The building already has a name: Skye. It is also the name of a Scottish island full of grassy and mountainous wastelands, rivers, lakes and moors, a setting for many movies.

who will produce extracts for the production of tropical beverages in the laboratory part of the Incubators. "It is a Brazilian-German consortium which presented a very innovative concept new to the Polish market", says director Mazurkiewicz. The building already has a name: Skye. It is also the name of a Scottish island full of grassy and mountainous wastelands, rivers, lakes and moors, a setting for many movies. It is called the Isle of Mists, and those who have visited it recall it as a place where you can recharge the batteries looking at the views there which, depending on weather, change just like in a kaleidoscope. The Skye in Olszewskiego Street in Kielce changes beautifully in the sun and you can get the impression that the façade is reflected in water. But that is not the only similarity.

"The Isle of Skye is a very beautiful, interesting and ecological place and our building has a lot to do with ecology. We have used energy-saving and environmentally friendly equipment and technologies."

Almost all facades have been equipped with photovoltaic panels, installed also on a canopy above the main entrance, which will translate into lower operating costs and in turn lower lease price for our ten-

ants", stresses Mazurkiewicz. Skye is heated by and supplied with energy from Europe's most modern photovoltaic systems, similar to the one used in Jasionka airport near Rzeszów. The installation is equipped with automatic system for snow and ice melting, the so-called NoFrost application. Interestingly, carports automatically cleaned of snow will be installed at 80 parking places in the new parking lot of KTP. In addition, Energy Management System has been implemented in the same building, which will show savings in carbon dioxide emission achieved thanks to the installed panels. Moreover, similar solutions will be introduced to other facilities of the Park. Photovoltaic panels will be installed on roofing of Roma production hall erected three years ago and the Technology Centre, where the installation will cover all the stairwells and the entire roof of the building. "In total, we will have five independent sources of energy production. It will be directed to one place and from there it will be distributed to other facilities of the Park. This is a very innovative solution and I expect there will be lots of visitors who will like to learn about our solution. We are absolutely a pioneer when it comes to technology parks and management of park's facilities", emphasizes director Szymon Mazurkiewicz. And finally, the icing on the cake, namely

something for the future tenants of Incubators to relax, as we have also thought about it. The relaxation zone also refers to Scotland, and specifically to golf that originated from that country.

In a specially designed room with artificial grass you will be able to break away for a moment from the sophisticated world of software and hardware and practice golf on a professional golf stimulator.

"Without doubt, we have created top quality infrastructure for our tenants. However, the value that cannot be overestimated has already been observed in our technological Centre and basic incubator, which have operated for the past several years. Our tenants do not only have excellent technological support but they can also work in a very innovative and creative environment through which they can have access to new knowledge, contacts and business networks. Undoubtedly, it helps to increase their income", sums up Mazurkiewicz.

/ Start-ups and IT companies operating on the market for not longer than three years are offered preferential rental rates in the first year they will pay only 30% of the basic rental rate.



RECRUITMENT FOR SKYPE IT INCUBATORS

KTP offer is addressed to companies in the IT/ICT and creative sectors, from start-ups (incubation services) and developing companies (rental of office and commercial space) to the companies in the expansion stage.

Start-ups and IT companies operating on the market for not longer than three years are offered preferential rental rates. In the first year of operation, the discount amounts to 70% of the basic rate (PLN25/ square meter), in the second – 55% and in the third – 40%. In the fourth year of operation, a company will have to cover the entire cost of renting premises.

HE WHO DOES NOT DEVELOP, DEVOLVES

KIELCE TECHNOLOGY PARK IS CONSTANTLY EXPANDING. NEW PRODUCTION HALLS, AS WELL AS FULLY DEVELOPED AREAS ARE WAITING FOR THE ENTREPRENEURS. BUT IT IS NOT EVERYTHING. "WE GIVE A LOT MORE THAN A PLACE", ENSURES JUSTYNA LICHOSIK, DEPUTY DIRECTOR OF KIELCE TECHNOLOGY PARK.

The first companies rented office space upon completion of the halls. Two of them (Yuyao Tech and Recife Tech) have more than 3500 sq. m, the third one (Singapore Tech) - more than 2,200 sq. m. "Vive Creation Company will be our new tenant. It intends to rent space for five years. The company announced that within three years it will employ 180 people. Later this year, additional 120 people will find employment at Olszewskiego Street", says Justyna Lichosik. As she points out, all the production halls will have properly prepared research, development and social facilities, including car parks. We will soon start the commercialization of space in the two remaining halls", says deputy-director. Both halls, the smaller Singapore Tech, and the larger Rectife Tech, are prepared to welcome companies from engineering industry, including manufacturers of 'tailor-made' machinery. "The halls are modern facilities. They have been built with the use of ecological technologies, thanks to which the operating costs will be much lower", she adds. The buildings will be equipped with heat pumps installations and a heat recovery system. The halls are part of the Technology Centre of Kielce Technology Park.

Two proposals

Investment areas also enjoy great interest of entrepreneurs. Recently, a German company Marbach, manufacturing packaging machines, has purchased a plot of land at Olszewskiego Street. On the area of 7 thousand square meters a production facility will be built employing 100 people. There are two more plots of land offered for sale, ranging from 0.5 to 0.7 hectare. "The plots have complete infrastructure and are ready for investments. You can built business from scratch there. Kielce Technology Park offers support for investors. On site, they will have access to all required facilities", stresses Justyna Lichosik. Park's offer includes technological and business environment for new investments, which is an additional attraction. "It is a place where entrepreneurs have easy access to business consulting services. On preferential terms, entrepreneurs can use newly established R&D centers and technological lines. Human factor is also of great importance.

"Experts will be on site, which will greatly facilitate and accelerate the operation of the production processes. Today's market, and our lives, are subject to a very rapid change. The long search for solutions, or people who apply them, can result in some other companies overtaking

us. This is particularly evident in the information technology industry, where companies are competing in implementing innovative solutions", says Justyna Lichosik. So far, the interest of companies gives rise to positive thinking. "You can see it when looking at tenders. I am not saying that we are dealing with the rapid recovery in the industry, but there are some signs of that process. I mean mostly the metal industry, where the interest in investment is increasing. In our region, the metal industry has a strong tradition, created by such companies as SHL, Iskra or Chemar. Increasingly, there are companies that manufacture 'tailor-made' machines. Their main potential is the engineering thought", adds Justyna Lichosik. This idea, supported by specific technological solutions, which are available on-site, serves the dynamic development of companies.

Success is more easily achieved

Real examples of success are most convincing. One of them is Utech Technics, a company specializing in design, modernization and repair of machines. Soon, it will start its operations in Kielce Technology Park. The company cooperates with the largest steel mills and cement plants in our region. Another example is the aforementioned VIVE company, associated with the market of second-hand clothes. "VIVE uses a very modern technology. A line for sorting clothes, controlled by voice, will be one of the most modern in this part of Europe", says deputy director of KTP. Such innovative solutions are the foundation of VIVE's success, which is doing very well in a competitive market.

The completion of the project entitled „Development of Infrastructure and R&D areas of Kielce Technology Park" does not mean the end of investments. The location of KTP is conducive to its development. "I frequently visit technology parks, which are located in the centers of cities. Such locations greatly reduce the potential for development, because it is difficult to acquire new land", says Justyna Lichosik. In the case of Kielce Technology Park expansion, especially in the northerly direction, is still possible. This involves the extension of Olszewskiego Street right up Witosa Street. There will be new investment areas there. "There are more years of development before us. I think at the moment we are in the middle of the road", says the deputy director of KTP.

At the moment Kielce Technology Park has 40,000 sq. m. of built-up infrastructure. By the year 2022, further 40,000 sq. m. will be equipped with necessary infrastructure.

THE JOURNEY TO ANOTHER WORLD. A VISIT TO THE ENERGY SCIENCE CENTER

Warsaw has the Copernicus Science Centre, Gdynia has the Experiment Centre, and Toruń has its Knowledge Mill. Similarly, Kielce has the Energy Science Centre located in Kielce Technology Park. How does it differ from other centers?

"Everything is different here. It's really a different world, locked in a room of a unique form. It is an unusual place where visitors will not find elements that are known to them from other such institutions", emphasizes Piotr Giemborek of the Krakow Fabryka Dekoracji, one of three companies (together with New Amsterdam and NoLabel) included in the consortium that won the tender to design and build the Energy Science Centre.

The Kielce Science Center occupies the second floor of a new complex of incubators of KTP, which is housed in a former office building of Chemar plant at 6 Olszewskiego Street. The exhibition is divided into three thematic zones: Fire and Earth, Air and Water and the Man. There are 28 interactive stands that allow the visitors to carry out their own experiments related to the processing and use of energy. All of them form a coherent story about energy and the entire exhibition is fraught with a steampunk atmosphere of an old factory.

"The beginning of a trip to this extraordinary world begins in the hall, where visitors pass through a great, mysterious door, breaking the minimalism of black-and-white space. Then there is an interactive stand, which constitutes a substantive introduction to the content of the exhibition. The entire exhibition is opened by a mining harvester, which symbolically begins the process of energy conversion with the first extraction of raw materials", explains Piotr Giemborek.

Perhaps the most recognizable exhibit is the above mentioned, powerful, weighing mere half a ton winch. "This device refers in its form to

a mining harvester but is driven by human muscles. You could call it the hamster wheel, but it is not only about running. The task of the visitor is to extract the greatest amount of material from the Earth's interior and transport it to the main tank, from which it is discharged to the next level by means of the Archimedean screw", says Piotr Giemborek.

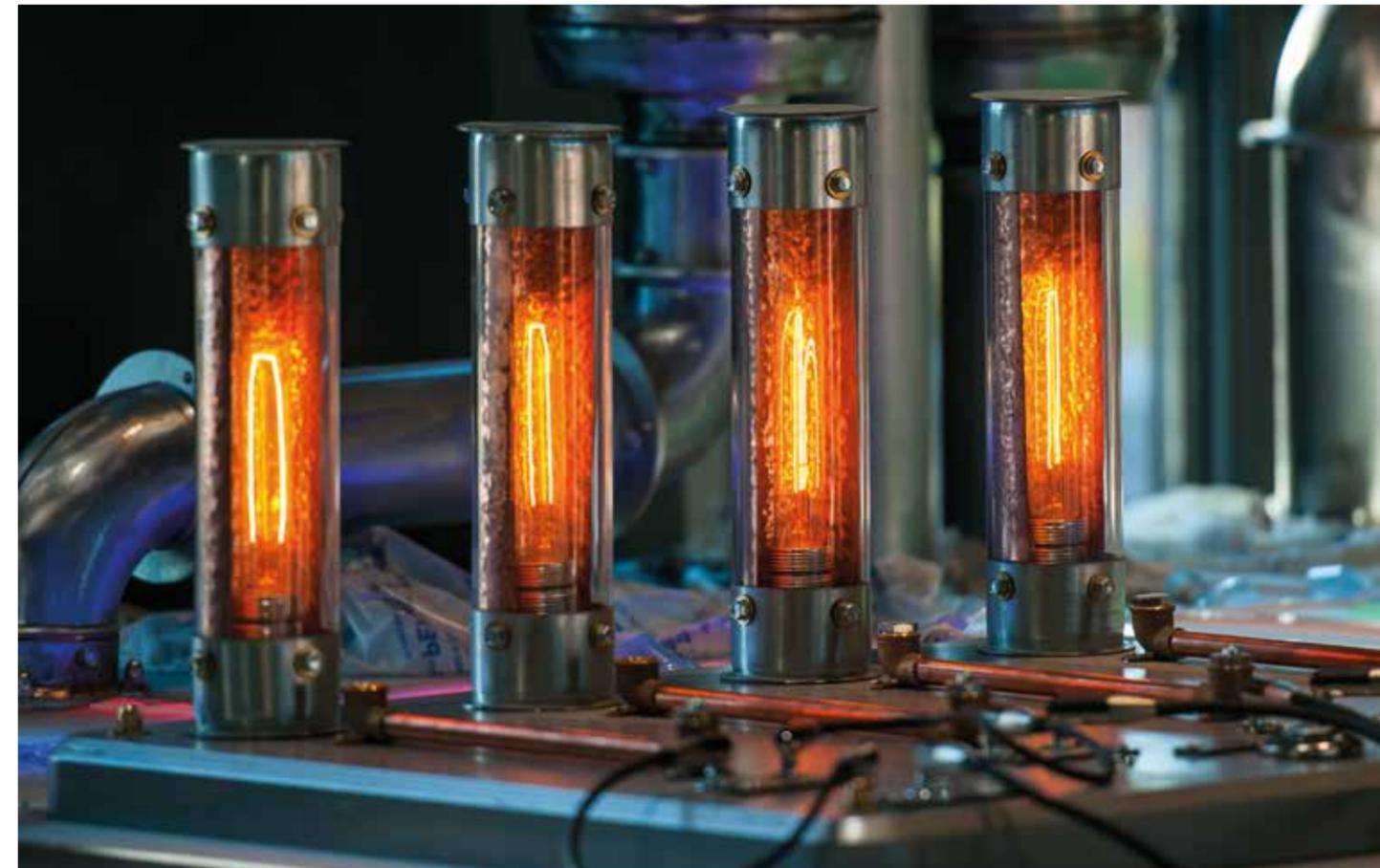
Water dams are also very interesting devices. There, a small river can be transformed into a sizeable storage reservoir.

Importantly, the whole exhibition is constructed so that the experiment conducted at each of 28 experimental stands has a direct impact on the interaction with another. As a result, visitors can experience a great adventure and become part of the story about the power", adds Sylwia Mularczyk of Kielce Technology Park, the coordinator of the Energy Science Centre. For example, the mining winch is connected to a 4-meter drill and a 5-meter „assembly line".

The entire exhibition has been planned in such a way so that it can be visited in several ways, and school groups or other organized groups can benefit from several specially designed sight-seeing routes. "It allows teachers to conduct lessons in the center related to a specific topic, e.g. the history of mining, ecology, industry, water transport or simple machines. Thanks to it you can learn something new in every route", says Sylwia Mularczyk.

An interesting fact is the use of the so-called energy pipeline. "This is a novelty on a global scale. While visiting the center you can collect points for conducting experiments. Then the points are transferred to a user account and guests of the exhibition - classes and schools - can compete with each other and win prizes. During joint experimenting, visitors will learn cooperation and the number of points scored will also depend on

THIS IS THE FIRST SUCH PLACE ON THE MAP OF KIELCE AND UNIQUE IN THE COUNTRY. IT MOVES VISITORS TO THE FAIRY TALE WORLD OF ENERGY, WHICH THEY DO NOT WANT TO LEAVE.



► the quality of such cooperation”, explains Sylwia Mularczyk.

The brains behind the whole exhibition, its control room and command center, is a laboratory called Power Generator, situated on the mezzanine floor in a large, glass-walled cage suspended from the ceiling. There you can carry out experiments in biology, chemistry and physics. “We have prepared an offer for both school groups and families. We will organize scientific workshops and scientific birthday parties as well as „free experimentation” sessions.

In the Energy Science Center we will also organize regular scientific meetings, interesting events for adults, run an energy science club and an energy academy. We will also invite interesting guests from the world of science”, explains the Centre’s coordinator.

The Energy Science Center also has its 3D cinema, a shop with souvenirs related to the exhibition, and the ticketing system is organized in the same way as in modern cinema complexes. It is open six days a week, except Mondays.

The Energy Science Centre is complemented with the Energy Garden, located across the Olszewskiego street, next to the new car park. In this green enclave science is intertwined with fun, relaxation and rest. “There is a gym for those seeking exercise and sports challenge and slides for children taking advantage of different levels of terrain as well as a carousel driven in an unusual way”,

Energy Science Centre outdoor and creating the Energy Garden. We wanted to open the park for the inhabitants of Kielce and escape from being associated entirely with the place where people work and earn money. We want it to be a place for meetings and entertainment for all Kielce inhabitants”, says Szymon Mazurkiewicz, director of Kielce Technology Park. The Garden designers believe that recreational and educational space is never too much and this location is ideal to encourage people to visit the Centre.

We hope that the Energy Garden will be associated not only with an exhibition inside the building, but it will become an autonomous entity, a place to relax and find information on health and mechanics. This garden gives the opportunity to revitalize the city and is a great place for organizing scientific events. Also during holidays it will help children and youth learn something very obvious in the fresh air instead of spending time at home”, adds Piotr Giemborek.

The construction of the Energy Science Center has cost 4 million zlotys, the Energy Garden will cost another million. But KTP still has to dot the “i’s” and cross the “t’s”. Director Szymon Mazurkiewicz announces that today he is looking at this project more widely and certainly the Centre will develop in the future: “If we can achieve the goals that we set today, in the context of even a relatively small space, then we will do our best to raise money for the development of this pro-



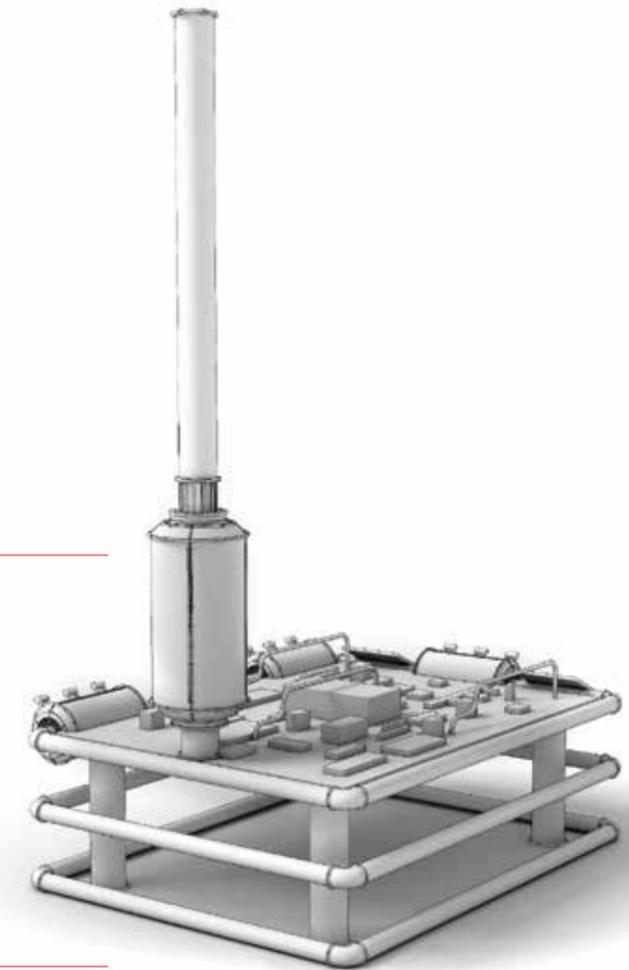
says Sylwia Mularczyk. The decision to build the garden was affected by a coincidence. “When we were wondering what to do with an adjacent plot, the question arose how it could be used well. Then came the concept of establishing the



ject. When recently I spoke about the project in Hungary, our partners from the district of Csepel in Budapest were so amazed that they said they would love to move the Energy Science Centre to Hungary.

ATTRACTIONS OF THE CENTRE INCLUDE:

An electrical substation is one of the places where you can check how much power a medium-sized city like Kielce needs and how this energy is distributed. The substation is a huge, illuminated scale model of a town. The task of the visitor is to solve the puzzle, consisting of a logical combination of buildings, facilities, including power plants, transformer stations, transmission lines, street lighting or rail. The main aim of the experiment is to create a perfect place. The station is equipped with two touch screens, and in order to connect the various elements the visitors to the center will use special applications.

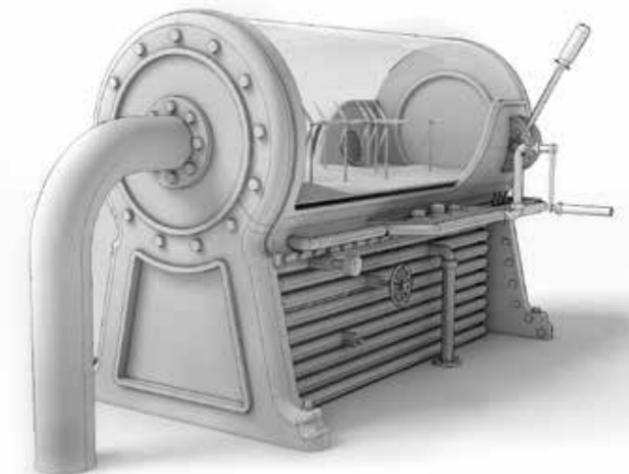


A wind station will be situated in the „air and water” zone. Thanks to it, the visitors will learn about the operation of the wind turbine and about the process of energy conversion from wind turbines. The task of the visitor is to set the relevant variables in order to generate the greatest amount of electricity. By means of a lever they will change climatic conditions surrounding a number of different wind turbines, and even reverse the direction of the wind.

ARE YOU PLANNING TO VISIT THE ENERGY SCIENCE CENTRE? SUBSCRIBE TO OUR NEWSLETTER.

The Energy Science Center creates a database of schools, institutions and those who want to visit the facility and participate in the events organized here. Those who have registered will receive information about booking possibilities, news, competitions and events held at the Centre.

Just send an e-mail to:
karolina.cieslik@technopark.kielce.pl





FASHION
DESIGN

Made in Fashion Design

Several hundred square meters of workshops, including a sewing room, a graphic design studio, a photographic studio, a show room, and support in creating product marketing strategy as well as assistance in attracting investors and customers. Kielce Technology Park will also train designers and fashion enthusiasts.

/ The offer of Fashion Design Centre is addressed to students and graduates of university courses related to design and fine arts as well as fashion enthusiasts.



Creating the Fashion Design Competence and Creativity Centre is a bottom-up idea. For some time, we have had some young people who are interested in fashion and want to develop their skills visiting our Park. What is more, there are some professional fashion institutions in Kielce, such as the Institute of Fine Arts of Jan Kochanowski University, which runs courses in fashion design, as well as the renowned Off-Fashion contest. We decided to consolidate that potential in one place", explains Szymon Mazurkiewicz, director of Kielce Technology Park.

Design and sell

Start-ups in the KTP's Centre of Excellence and Creativity Fashion Design include a sewing-prototype studio equipped with all kinds of sewing machines and a cutting table and a graphic design studio with specialized software and hardware. There is also a modern photographic studio, a library, where we will find publications related to fashion, a space for meetings, a showroom with a mobile cat walk for the presentation of projects, which at any moment can be used as a conference table.

There will also be exhibition space, where projects created here will be presented on mannequins. A total of 400 square meters. "The Centre will serve several compatible functions. You will be able to design a product, make its prototype, learn about sales potential, take advantage of the so-called trend books, i.e. see how the product fits into the currently prevailing trends, and meet the people who will launch products, projects or ideas that we believe should be commercialized on the market", lists Szymon Mazurkiewicz.

Design academy

The offer of Fashion Design Centre is addressed to students and graduates of university courses related to design and fine arts from Poland and abroad as well as fashion enthusiasts, regardless of their age. There they will acquire and improve their knowledge during courses, workshops and training seminars organized by the Centre. The courses offered by the Centre will cover materials science, trend book analysis, design and visual merchandising, which is creating retail space, and - most importantly - effective search for investors and customers, e.g. during workshops showing

how to open an online store or how to create directories. "Our offer is comprehensive and largely geared to support young entrepreneurs. Course participants will improve their skills in prototyping, sewing, fashion show organization or the process of placing a product on the market", explains Karolina Majcherczyk from the Department of Developmental Projects of Kielce Technology Park, the coordinator of the new unit.

Course participants will work in small groups, under the guidance of a coach. At the same time the Centre will be able to provide instruction for at least three such teams. At their disposal they will have high-class professionals, including dressmakers, garment constructors, graphic designers, photographers or professionals in building marketing strategies. Here students of vocational schools will also find their place. "We want to show young people that tailor or garment constructor are the professions future. These professions are dying. In Kielce, there are only five girls at the moment trained to become garment constructors and the market lacks such professionals", explains Karolina Majcherczyk. Fortunately, vocational education is beginning to recover. This year the Ministry



/ The Centre will serve several compatible functions. Here, under the supervision of specialists, you will be able to create a prototype of a product or learn about its sales potential.



- ▶ of Education introduced a new profession - fashion industry technologist, with two qualifications: designing and producing garments and the organization of the manufacturing processes of clothing.

Supplementing the university offer

The Fashion Design Centre wants to complement the activities of art academies and combine science with industry, which is to incorporate in the process of creating new designs a range of tools to enable their commercialization. "We are building a complementary offer to what really is missing at colleges today.

Universities should educate people who, on the one hand, can design great things, but who are also able to cope with their sales.

The problem of artistic courses at universities is that graduates are not properly educated in how to function on the market. Only 5 percent of them are employed in the profession", explains Szymon Mazurkiewicz. LabDesign Rapid Prototyping Centre, equipped with the latest 3D printer, gives additional opportunities for development. "Here, under the supervision of specialists, you will be able to create a prototype of a product, a finished product, or even start a short production series. Certain elements of clothing will be developed in a real and tangible way. They will be checked, experimented with in terms of finishing, and also presented to a potential company or person interested in their commercialization", says the director of KTP.

Support for businesses

The courses organized in the Fashion Design Centre will, at least in the beginning,

be free of charge. Kielce Technology Park wants to obtain new grants for that purpose. At the same time, the unit will carry out commercial activities. One possibility is to use the photographic studio equipped with modern facilities, where companies can take the so-called pack shots – professional product, advertising and catalogue photographs of highest quality, influencing the perception of the product. "We haven't had anything like this in Kielce so far. Jewelry stores or boutiques will be able to take professional photographs of their products and then use them in catalogues", says Karolina Majcherczyk. "We also offer entrepreneurs the opportunity to rent space to organize fashion shows and to create collections or individual products". Fashion Design Center also opens for professionals. "We are preparing a special program to which we will invite designers from different countries. They will be working in groups of 5 or 6 on specific solutions for different brands. Through the internationalization of projects we will get a completely different perspective on the product, its functionality, design, and ergonomics. I am convinced that we will achieve good results recognized not only by the Polish fashion companies, but also foreign ones", stresses Szymon Mazurkiewicz.

The future belongs to design

The Fashion Design Centre is already building a network of cooperation with artistic schools, including Jan Kochanowski University and universities in Łódź, Cracow and Warsaw, vocational schools and fashion companies. This network will be continuously expanded. KTP wants to get involved in the next year's edition of Off-Fashion Festival organized by Kielce Cultural Centre. "We want to help young designers enter the fashion market. We



/ Fashion Design Centre wants to complement the activities of art academies and combine science with industry

will help them prepare and carry out a professional photo session, create a directory or fashion show for potential investors and customers. We will show them how to commercialize the product. This will be the prize that we will offer in this contest", says Karolina Majcherczyk.

Kielce Technology Park will also apply for further grants for the development of the Fashion Design Centre, and the possibilities for that are quite considerable.

"The program dedicated to the so-called Eastern Poland allocates a lot of money to design, available both for companies and institutions that create some trends in this field. Access to tens of millions of euro in the coming years will make both the Park and companies operating there a huge beneficiary of this money. Through good design that will be created in the Fashion Design Centre, we will be able to raise the competitiveness of our companies", says Szymon Mazurkiewicz.

The creation of the Centre of Competence and Creativity in the field of Fashion Design is part of the investment entitled „The development of infrastructure and R&D areas of Kielce Technology Park”, co-financed by the European Union under the Operational Programme Development of Eastern Poland.





The 3D Print Center of Kielce Technology Park is operating and waiting for orders. Businessmen from various industries have the most modern in Poland 3D printer and the support of highly qualified specialists at their disposal.

'PRINTED' PRODUCT

The center is a completely new area of the Park's business operation, the perfect complement to the high quality of infrastructure, providing great opportunities both in terms of research and development, and business. This is one of the most innovative centers of prototyping and manufacturing of the so-called short series in Poland. There is no doubt that this is

advanced SLS technology (Selective Laser Sintering), which consists of laser sintering of polyamide powders (high quality plastic material) of computer designed solid models with the aid of spatial design software. The materials used in printing include a very strong and durable plastic dedicated to production engineering, rigid plastic with glass fiber resistant to deformation due to heat as well as special alu-



Stratasys. PolyJet Technology.

the future of the city and the region", says Szymon Mazurkiewicz, director of Kielce Technology Park. And he adds, "We should now count on innovation in 3D printing or prototyping, the areas that have not been developed in Kielce, at least not to the extent that they are now. The potential is great and there are people who want to pursue their passions. Just equip them with the right tools".

One center, two technologies

The brains behind the 3D Print Center located in Kielce Technology Park is the 3D Systems - ProX 500Plus printer, the first top quality printer in Poland with such a wide range of applications. The printer uses

minum with plastic fiber, also resistant to deformation due to heat and having cast metal appearance. The final product is a high quality and accuracy sustainable thermoplastic model with excellent mechanical properties, resistant to external conditions - insensitive to UV rays, resistant to temperatures of -40 ° C to 185 ° C, with full functionality at the time when it is taken out of the printer, with the possibility of sterilization for medical USP class VI, and meeting certain standards for medical products, and fit for contact with food.

The Print Centre also provides services of 3D printing using FDM technology, which consists of a layered deposition of thermoplastic material. This less advanced than the SLS technology is mainly used to pro-

/ The center is a completely new area of the Park's business operation, the perfect complement to the high quality of infrastructure, providing great opportunities both in terms of research and development, and business.



various industries. "There was a wide range of prototypes – from very specific functional elements used in firefighting to toys for children. All the prototypes within this project are prepared free of charge. We hope that these first products and services will enable us to create our own market. The more so as the interest in our activities is already quite noticeable. We receive inquiries from different parts of Poland, including Masovia and Lesser Poland districts", says Szymon Mazurkiewicz. "During negotiations, entrepreneurs are quite cautious. For some it is difficult to image that a finished product can be produced without running the entire production line and that they can have a thousand of items ready within two-three days. However, we are optimistic. The first prototypes created in the Print Centre have shown that 3D printing is a future", he adds.

3D printing also allows you to react quickly to any market changes. "Today the product does not live for as long as than even a few years ago. Trends and consumer needs are constantly changing.

duce illustrative prototypes, which allows maximum refinement of shape, ergonomics and functionality of the final product.

From prototype to ready-product

The range of services of the Print Center is wide. "With the support of our specialists, highly qualified engineers, the entrepreneurs can make a prototype of a new product, or even a product ready for sale, provided that its technical characteristics are identical with those of our construction material. We can also „print“ placeholders, necessary for the functioning of a given device, the forms for checking the calibration parameters for a specific product, and also run a short production series, consisting for example of a thousand pieces", explains Justyna Lichosik, deputy director of the Kielce Technology Park.

With ready-made products, you can do almost anything: you can paint, varnish or sterilize them, which creates tremendous

opportunities for entrepreneurs producing for example tools and medical accessories. "Importantly, we can also make food packaging. We have the necessary certificate allowing our products to come into contact with food", says Justyna Lichosik.

All you need is an idea

The offer of the print Centre is addressed to entrepreneurs, but also designers, construction and design offices from various places in Poland and abroad, operating in industries related with plastics industry, car industry, electronics, medicine, industrial design, architecture, food industry, aviation, astronautics and defense industry. Everyone interested in our services may contact us either with a ready project completed in Inventor, Cata, SolidWorks programs or just with a concept. In the case of the latter, our engineers using specialized spatial design programs will put their ideas on paper", explains Justyna Lichosik.

Saving time and money

Taking advantage of the Print Centre's offer first of all makes it possible to save time and money. "Depending on the complexity of the project, we are able to produce a product ready for sale within one or two days. A company no longer needs to wait for injection molds, or run the entire production line. Time saving is huge, not to mention money, which, thanks to a simplified production process for both unit and mass production, remain in the customer's pocket. Our printer can produce parts that can successfully replace those produced by means of the traditional method of injection without incurring additional high costs", explains Justyna Lichosik.

3D printing also allows you to react quickly to any market changes. "Today the product does not live for as long as even a few years ago. Trends and consumer needs are constantly changing. The use the Centre's services gives you the opportunity to re-

lease to the market short series of limited edition products. 3D printing is ideal for personalized, unique production, and even in the case of mass production it works well", notes Justyna Lichosik.

Finally, the Print Centre provides the feasibility of a custom-made product. "This is particularly important when, for example, one of the elements of much needed equipment is damaged and its repair or replacement under normal conditions would take 2-3 weeks. Thanks to the 3D printout we can have the same item meeting all the standards in stock within hours", says Justyna Lichosik.

Toys for start

The first order of the Print Centre has already been completed. The implementation of the KTP project "Perspectives of Regional Innovation Strategy for Świętokrzyskie – Stage IV" allowed us to produce 30 prototypes of products for entrepreneurs from

University of knowledge

The Print Centre is not only the support for entrepreneurs but also the possibility to implement research and development projects in the future. "The next EU financial perspective for the years 2014-2020 has just started. And again we want to focus on the development of R&D sector, i.e. further development of knowledge resources, however, in a slightly different dimension. Across the country, huge sums of money have been invested in the development of scientific and research base, which today, in my opinion, is used to a small extent and only for educational purposes instead of economic or commercial ones. The invested money should increase Poland's GDP. Focusing on new scientific and research aspects, we aim at the creation of the so-called university of knowledge, but in very practical terms", says Szymon Mazurkiewicz.

CENTERS FOR THE FUTURE

Research and development centers are indirect reference to what existed in our companies and factories many years ago. They conducted research and designed prototypes. After 1989, when the industry had to deal with fierce competition and financial results were of utmost importance, business units involved in science projects and development became unnecessary and obsolete, simply because they were not profitable enough. It quickly became clear that innovative ideas had to be brought from abroad, which was costly and time consuming. This is evident not only globally but also on the local Świętokrzyskie market. "If several of our companies, for example in the area of numerically controlled machines, buy their services in Silesia, it is reasonable to provide such services here, which will reduce logistics costs and enable our companies to be more competitive", explains Szymon Mazurkiewicz.



Controlled by the mind

Manual setting of machines using the caliper is thing of the past. The Centre of CNC Competence (Computerized Numerical Control) of Kielce Technology Park has machinery for working materials (milling machines, lathes, grinders, drills) controlled from a user's desktop by means of special software or drivers. "The software is of very high quality. It enables fast, highly accurate and repeatable production of highly complex shapes and machine parts", says Szymon Mazurkiewicz. „Dusty” and „wet” zones have been identified in the CNC Center depending on the type of

machines used there. The personnel has also been properly trained.



Laser plans

KTP plans to open its Centre for Advanced Laser Technologies. It will be situated in Roma Tech Hall at 20 Olszewskiego Street. "The genesis of the new unit is similar to the other center. Many companies from the Świętokrzyski region order services in the field of laser technology outside the region. The new center will cater for their needs. Besides, under an agreement with the operator of the new unit we will educate staff", says Szymon Mazurkiewicz. Kielce Technology Park intends to cooperate with Kielce University of Technology which has a lot of experience in this field. The Centre for Advanced Laser Technologies of KTP will include a laser cutter for sheet metal machining, a press brake and guillotine shears. The facilities will be controlled electronically through CAD / CAM software just like at the CNC Competence Centre.



Extensive use of print

3D Print Center has been equipped with a specialized printer. "This is world-class equipment worth 2.5 million dollars. On

We look at the needs of businesses that should be satisfied by Kielce Technology Park and as a result we create research and development centers. "Without them, our companies would lose competitiveness and seek solutions somewhere else", says Szymon Mazurkiewicz, director of the KTP.

the demand of entrepreneurs we will produce prototypes of their products and even short series for industry", says Szymon Mazurkiewicz. Three 3D design teams that will use several devices of this type will be established. "We hope to create a profitable institution that will be separated from the structures of the Park. It will provide services for Polish and foreign companies", says director Mazurkiewicz. For more information, please check page 24.



For beginners and tycoons

3D Design is connected with computer science. Kielce Technology Park has the so-called Future Hub cluster, bringing together companies involved in new technologies. ICT infrastructure will be soon developed there. This is the result of an agreement signed in June, thanks to which new laboratories equipped with the latest computer software will be established. They will be operated by four companies, namely Kielce Complex Computers, E-SERVICE Rzeszow as well as Interlab and Kinnarps Poland from Warsaw. The KTP tenants as well as external companies will have free access to laboratory equipment and training rooms. "The aim of the project is to create modern equipment base in the form of hardware and software laboratories. It is here that specialized training will be conducted and research into new technologies will be carried out in cooperation with research centers", says the director of KTP. This is a task for the Cisco Networking Academy, which will become an innovative laboratory of data communications networks. IT labs will work on mobile ap-

plication prototypes, test the load of server applications and create multimedia and 2D or 3D computer graphics. "This is an offer which may interest a wide group of receivers, from start-ups to fully-developed companies", says Szymon Mazurkiewicz.



At the material library

In any technology associated with heavy industry, clothing industry and information technology the material used to make the product is the foundation. One might think that in the 21st century new discoveries in this field do not occur. Nothing could be further from the truth. The market of new materials is developing very dynamically and this development means that companies have a problem with an accurate selection of materials for their new products. Finding solutions without any assistance and guidance is difficult and that is why we need a base that everyone could use. Hence the idea of Innovative Materials Library situated in Skye Inc. The library will store materials for construction, interior design, industrial design, as well as clothing and footwear sectors. The library of Kielce Technology Park will be similar to the traditional one, but instead shelves with books there will be shelves with material samples with descriptions and QR codes that will direct the visitor to the online database.

MEET KIELCE TECHNOLOGY PARK

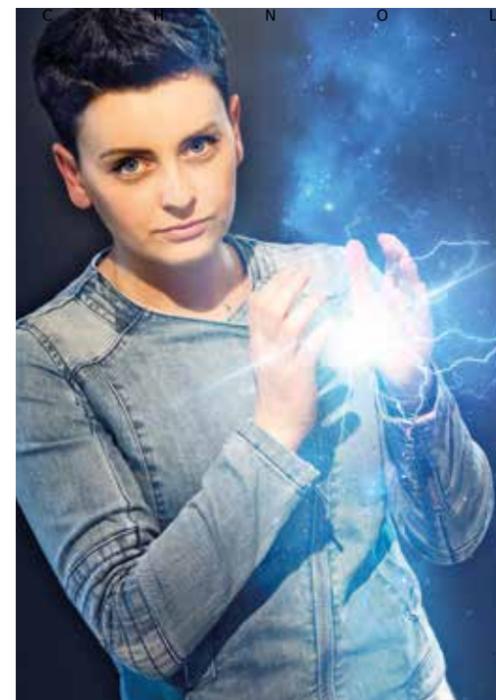
30

Thanks to the realization of the project „Development of infrastructure and R&D areas of Kielce Technology Park“ we managed to create a unique place. The employees of the Park, who combine passion with work, are responsible for individual parts of the Park.



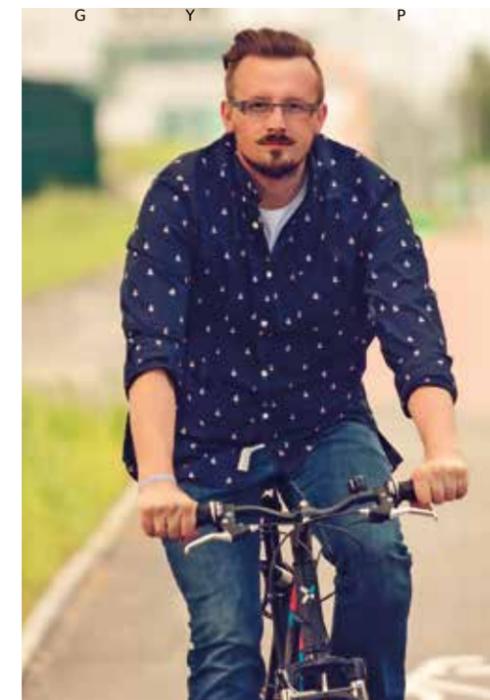
Szymon
Director, Kielce Technology Park

I am attracted to journeys into the unknown. Every day, we face the adversities so that at the right moment we can fill the sails. For you we are a safe harbor.



Sylwia
Energy Science Centre

They call me quicksilver. I stubbornly strive to achieve my dreams, even the childhood ones. I discover the mysteries of power at the Energy Science Centre for you.



Tomek
LabDesign Studio, Kielce Technology Park

With great impetus I cut space with a bicycle. I collect emotions generated by comics. Thanks to this I treat my work with creativity. I draw, design and create for you.



Justyna
Deputy-Director, Kielce Technology Park

In life we need a solid foundation as only in this way can we build safely for the future. I create new infrastructure of the Park for you.



Karolina
Fashion Design Centre of Competence and Creativity

I play with fashion, mixing a palette of styles with shades of imagination. Everything that makes us different is inside us, but we must have the courage to show it. For you I create a place where you will love design.



Nina
3D Print Centre

I often take on new challenges. What we do not know may prove priceless. I discover a new dimension of printing for you.

THE PROJECT „DEVELOPMENT OF INFRASTRUCTURE AND R&D AREAS OF KIELCE TECHNOLOGY PARK”
CONSISTS OF SEVERAL MEASURES:

Measure I

Extension of Zone 1 - Creation the Cluster of Technological Incubators of Kielce Technology Park

1. Comprehensive modernization of a former university office building for the establishment of the Cluster of Technological Incubators,
2. Building a car park,
3. Creation of a co-working space at Kielce Technology Park

Measure II

Extension of Zone 2 - Development of infrastructure and R&D areas of Technology Center

1. Construction of a production and warehouse space with research and development and social infrastructure,
2. Construction of industrial halls with a R&D infrastructure, offices and accompanying infrastructure,
3. Adaptation of the CT production hall's mezzanine along with the adaptation of rooms,
4. Creation of Rapid Prototyping LabDesign,
5. Establishment of the Centre of Excellence and Creativity in the field of Fashion Design,
6. Establishment of the Centre of Competence in the field of CNC

Measure III

Expansion of the common space of Zone 1 and Zone 2 of Kielce Technology Park

1. Development of ICT infrastructure of KTP,
2. Reclamation of Technology Park's areas,
3. Designing visual identification of the Park

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