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# ETI UTRIP

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ISO 14001 BUREAU VERITAS Certification
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- 70 years of good energy, perseverance and steadfastness
- Assembly line of the new EFI
- New Series of Arc Fault Detection Devices
- ETI's new website

**Tomaž Berginc, MSc CEO**
**Dr. Ing. Bernhard Kahl, Managing director**

# 70 years of good energy, perseverance and steadfastness

ETI's round anniversaries seem very likely to happen during demanding times. Our 40th anniversary took place during the disintegration of Socialist Federal Republic of Yugoslavia (SFRY), our 60th anniversary only a year after the great financial crisis - and our 70th anniversary is no exception. This year's Covid-19 pandemic has drastically changed not only economic conditions but even our daily lives. ETI's response, however, remains the same as in any crisis so far: we will not give in. From the very beginning, our company has been distinguished by perseverance, steadfastness and a strong desire for success, with which we have overcome every challenge.



The list of ETI's achievements over the last decade is long. We have taken a big step from the manufacturer of a partially rounded portfolio of individual products to both a reliable business partner and a technical consultant in one, as we are now able to offer a complete solution, tailored to a specific customer's needs. With the help of various software tools, we were able to connect with new customer segments, such as designers, who have a strong influence on the choice of the product brand in their projects. We have invested a lot in the development of new products and technologies, and our efforts have been rewarded every year with national awards for innovation from our Chamber of Commerce and Industry. We have entered the demanding sectors of industry and e-mobility, and supplied our customers with digital databases of our products and even opened a webstore. Thus, it can hardly be surprising that we have increased the group's sales revenues by more than 50 million euros in the last ten years. Major changes have also taken place in the technical field. We carried out a complete reorganization of production sites and automated a good part of the production of fuses, EFI switches, and remaining miniature circuit breakers will soon follow suit. 6 sigma principles for improving products and processes were introduced in all business functions.

Of course, you, our ETI family, have always been and will remain the main driver of progress. That is why we have defined human resource management as one of the three most important business functions in the 2016-2020 business strategy. To further improve our internal communication flows, we are making our newspaper universally accessible to everybody in ETI group. Utrip, which means the beat in Slovene, is a newspaper with more than 30 years' tradition, one could almost say it was ETI's unmissable companion for as long as we can remember. Through it, we will do our best to keep you up to date with all the important events within the entire group.

This year's difficult situation will not stop us from reaching our goals. In 2020, we did not cancel any of the development projects. Quite the opposite. We are accelerating our investments in production and development of new products. We are also putting up a fight in the market, still creating higher revenue growth than in 2019. At the same time, we are accelerating the completion of the last open projects from the current strategy and are already preparing a new business strategy for the period 2021-2025. Our plans are very ambitious in all respects, which is a logical continuation of what has already been achieved. Yet, we will at all times need to be able to react quickly to any changes in the business environment.

In the past, ETI has always found answers to the challenges of time and the markets, it has always been and will remain a reliable employer. From the early fighting for economic survival to facing modern global challenges, we are driven by our stubbornness, determination and willingness to work in difficult conditions. The company has grown from a few barracks into an international group, which is most distinguished by its resistance to any shocks. As we have proven in the past, together we can overcome any challenge if we are only aware of this responsibility and accept it with open arms.

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Miran Dolinšek

# Assembly line of the new EFI

One of the main requirements in the development of the new EFI was that the design must be suitable for the highest possible level of automation of component fabrication and final assembly. Therefore, it was necessary to look for appropriate design solutions that will be suitable for automatic fabrication and final assembly in the product development phase.

The concept of the assembly line is created according to our requirements, which we coordinated with the selected contractor HIDRIA TC Koper before implementation. The basic requirement was the highest possible level of automation and control of the entire assembly process from start to finish. However, all unsuitable semi-finished products at entry and any bad sub-assemblies that occur during the assembly phase must be discarded to the appropriate places for bad pieces.
Activities from the construction phase up to and including the pre-takeover of the assembly line were performed in the HIDRIA premises. After the confirmed pre-takeover, the assembly line was moved to the Izlake location. Although the line is constructed in a modular way, due to the relocation of the line, it was necessary to reset all the machines of the line and test the operation of the individual machines before start-up.
The assembly line comprises 15 machines, which are interconnected by appropriate manipulators or conveyor belts. The EFI assembly process is almost entirely automated. The exception is four manual jobs, which we did not automate due to their complexity and high costs. The first manual job is required at the beginning of the line for inserting the wound core and positioning the secondary winding taps of the core. The other three manual jobs are required to solder the secondary winding taps to an electronic card and insert the reset springs into the mechanism. In addition, the line operation must be monitored, possible congestion must be eliminated and the required material must be added to the dosing points or,

in the event of an EFI type change, the input material must be replaced.

When planning the line, it had to be taken into account that all standard EFIs were to be assembled on it. Currently, there are 71 technical types, which differ in the number of poles (EFI-P2 and EFI-P4), type of mechanism, rated currents, residual currents… Work on the line begins with entering a work order containing the EFI type and the number of pieces we want to make. We can enter several orders that will be assembled sequentially. When the work order is at the end of the batch, the computer checks the need to change the input material on the machines according to the difference between the previous and the new order. In case of a need for replacement, the line is stopped, the warning light on the machines where replacement is required flashes, and the machine displays show which material needs to be replaced. When the operator has replaced the material and confirmed the replacement, the machine is ready for operation. Once the replacement is completed and confirmed on all machines, the line is ready for the assembly of a new batch according to the work order.

Materials are inserted on the line or individual machines via vibrators (bulk material) or dosing strips (material packed in trays) and added by robot. The presence and suitability of the material are checked before taking the assembly material. If the material does not conform to the type of EFI being assembled, the material is discarded to an appropriate location on the machine. If the unsuitable material is repeated in succession, the machine stops and reports a material non-conformity error. In addition, during the assembly, we check the suitability of the assembly, the presence and position of the elements in the sub-assemblies, electrical conduction, the suitability of the welding parameters, perform the high-voltage test and finally the residual current EFI test. If the results deviate from the norm, the disputed subassembly is automatically discarded. All important assembly data is recorded in a database that ensures traceability via a 2D code printed on the EFI housing.

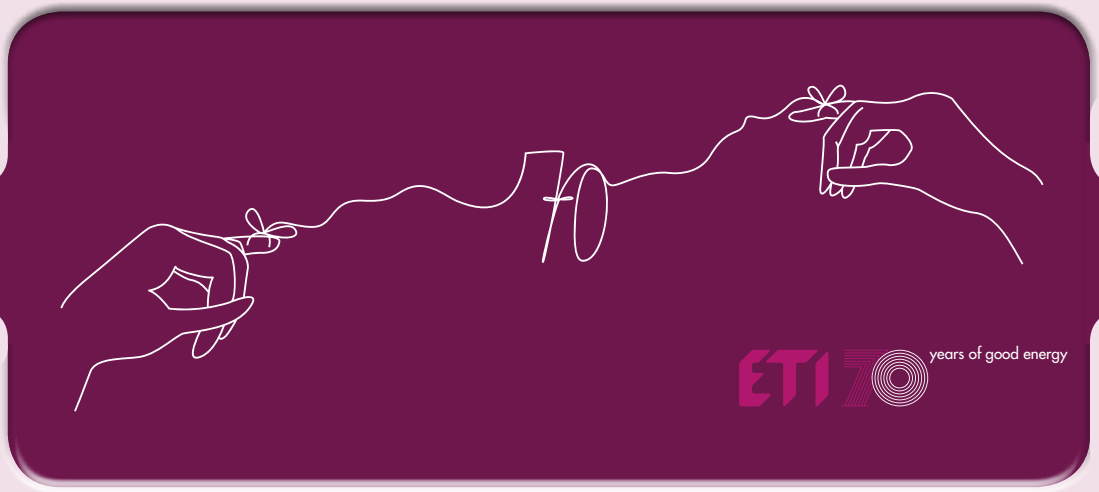
Once the RCCB has been assembled and the tripping test performed on the assembly line, the product is first magnetically adjusted, then additional tests are performed and finally the corresponding data is laser printed onto the housing. Magnetic adjustment and final control of the EFI circuit breaker are performed in the HYTRON test centre. The assembly line and test centre are physically connected by a conveyor belt, which represents the exit from the assembly line and the entrance to the test centre. Software-wise, however, the test centre is not connected to the assembly line and can operate completely independently. On entry, a 2D code printed on the EFI housing is read in the test centre. Depending on the EFI code, which is an integral part of the 2D code, the program automatically determines the data for laser printing, magnetic adjustment parameters and electrical tests. If the tests are positive, the customer's logo is printed and the cover screws are painted and sealed. The assembly line is currently in the takeover stage and products for regular sales are being assembled on it. Deficiencies that were not detected in the testing phase are being eliminated and usually only show up during mass production. By eliminating errors and related congestions on the line, we improve the technical availability and productivity on the assembly line.

Małgorzata Tabęcka

# New warehouse hall in ETI Polam

From the beginning of 2020, at ETI Polam, the construction of a new warehouse for the joint storage of our products has been completed. The hall is made of steel technology with profiled sandwich panels with a roof covered with a double pneumatic PVC tarpaulin.

The object that was built has dimensions of 70m x 30m, and its building area is 2,100 $m^2$. The cost of the hall was approx. 350 thousand euro. The hall is equipped with 10 rows of storage racks with different storage heights. In the central part of the hall, we have the possibility of storage at 5 height levels, it was made possible by the building 10.5 meters high in the ridge. The lowest rows are at the tent trailers (5 m high wall) with the storage mode at 3 heights. In order to handle the high levels, 2 new carts have been purchased that lift the pallet to a height of 6m.
There are 2037 new pallet places in the new facility. There are also separate places for an assortment of undersized dimensions goods, such as switchboards, busbars system or long rails too. The warehouse will be divided into zones according to the rotation of the assortment. There will also be a separate storage area for picking, shipments, etc.
Handed over construction object will let us to reorganize, and thus the improvement of customers service.




*»Modern electric fuses are marvellous devices for protecting life and equipment from potential power of uncontrolled electricity. Since the coming of electricity in the 1870s, they have been in front line for electrical defence. Indeed, it is fair to say that without the virtually fail-safe protection of the electric fuse there would be no modern electrical industry. Electricity would be regarded as far too dangerous for widespread use.«*

Prof. Stokes, University of Sydney

# ETI in numbers

**141 M euro in sales 2020**

**6 → >1900 ETI employees**

**2182 business partners**

**>14.000 products**

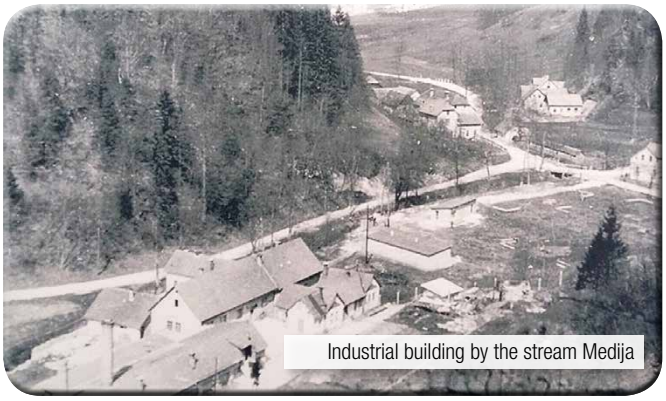
**17** Brands

**31** product patents

# ETI through history

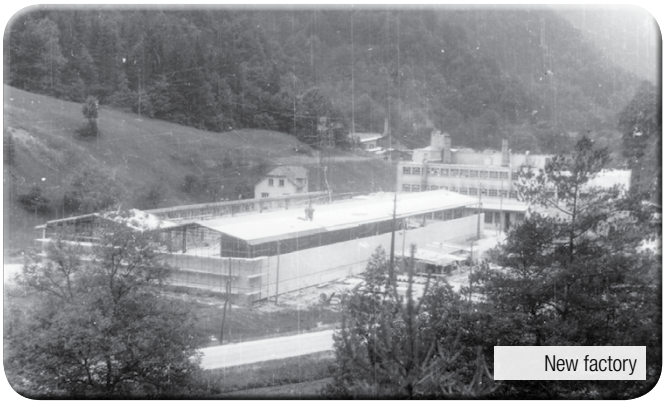
## 1950-1960:


Bergman pipe


Industrial building by the stream Medija

ETI's story began in 1950 with the production of ceramic tiles, a general shortage after World War II (including a lack of skills), and incredibly difficult working conditions, but with a strong will, perseverance, and desire to succeed. The right opportunity for development had emerged in the field of electro ceramic material, and the Bergman pipe became ETI's first export product. This simple porcelain elbow ensured the company's existence, so it's no surprise that it became the first graphic symbol of the Tovarna keramičnih izdelkov Izlake.

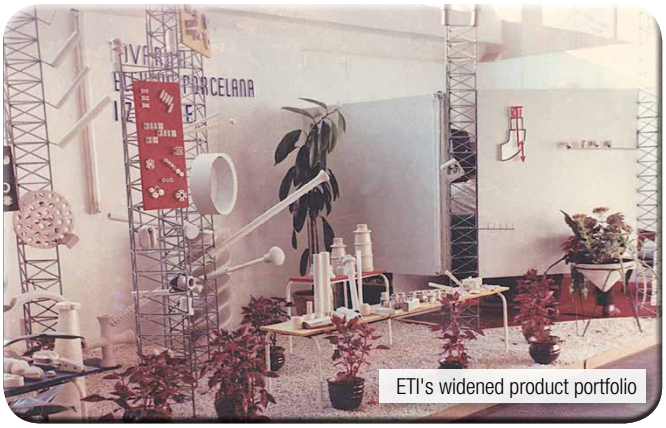
## 1960-1970:

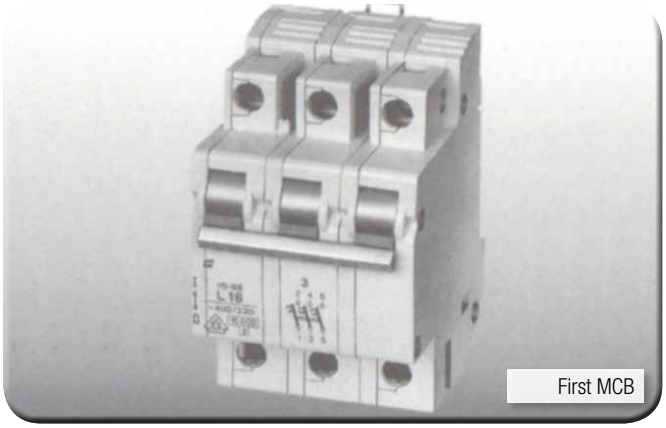

New factory


Fuse production

In its second decade, ETI became a real factory with modern production facilities and new furnaces, and fuses already began to take the lead in the product portfolio. With the fuses also a new name emerged - Tovarna elektroporcelana Izlake. ETI has been export-oriented since it was formed, which is also confirmed by the fact that already in this period, exports accounted for as much as a third of all revenues, which made the company the region largest exporter.

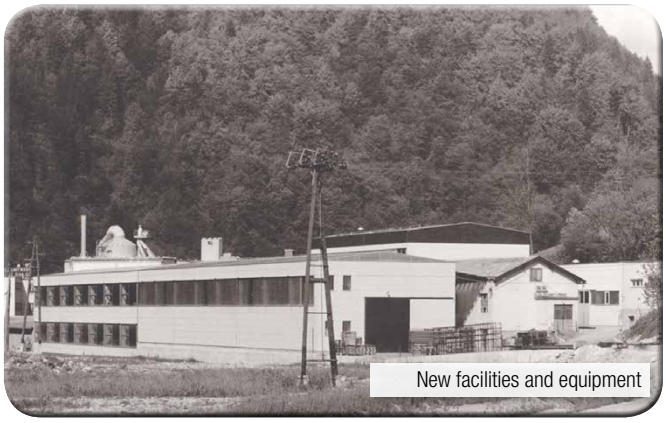
## 1970-1980:

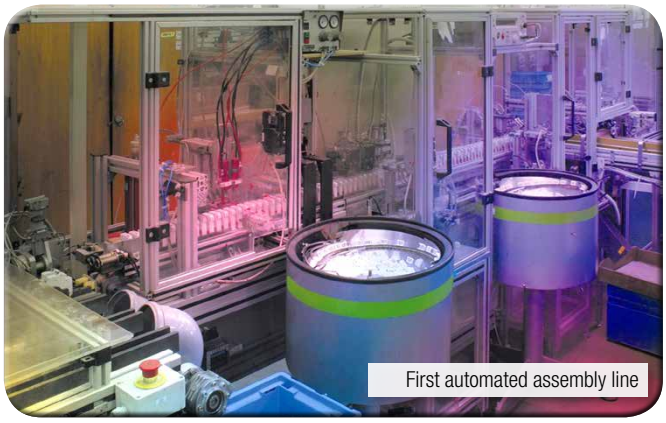

ETI's widened product portfolio


First MCB

ETI entered its third decade as the largest Slovenian and one of the largest Yugoslav manufacturers of electrotechnical products. It was during this time that the first beginnings of production automation began, resulting from the work of ETI's toolmakers themselves. The production of melting fuse elements was joined by the production of steatite masses and metal elements, which completed all the production processes. We also manufactured our first miniature circuit breaker. ETI became increasingly associated with more developed countries, and the first cooperation agreement was signed with the German company, Kopp. The decade ended with a new logo and company name: Elektroelement Izlake.

## 1980-1990:


New facilities and equipment


First automated assembly line

The 30th birthday was marked by new production halls for the metal products plant, storage rooms and final assembly, followed by a tool shop, a modern tunnel kiln, a galvanising plant, and a production hall for technical ceramics. Competitor Svit Kamnik joined ETI, and we also got our first computer. In addition to fuses, the production of circuit breakers grew more and more, which provided the company with a more competitive position in the world market. The 1980s also marked the beginning of a transformation, when manufacturing gradually gave way to marketing and development.

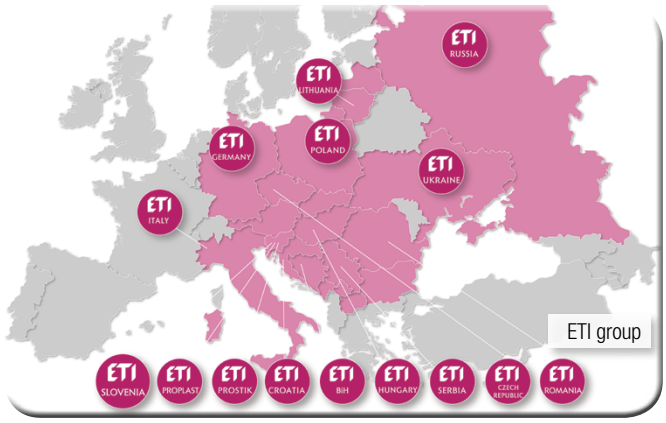
## 1990-2000:


First subsidiary

The first ETI Elektroelement d.d. general assembly

In 1993, ETI was granted its first foreign patent, when it protected a design solution for a new circuit breaker in Germany. During this period, the first two subsidiaries were established, ETI Polam and ETI Proplast (then ETI Gum). We were among the first Slovenian companies to obtain the international quality certificate ISO 9001, and later the environmental ISO 14001. We were also one of the first to open a learning centre. The majority owners of the company, now bearing the abbreviated name ETI, have become current and former employees.

## 2000-2010:



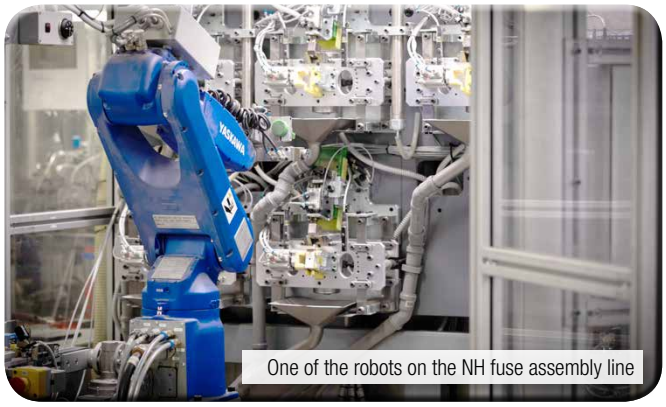
ETI group


Renewable energy protection

The ETI Group has grown rapidly, with subsidiaries established in Germany, Lithuania, Russia, Ukraine, Slovakia, Hungary, Romania, Bulgaria, Serbia, Bosnia and Herzegovina, Croatia, and an associate in Italy. A system integration approach was introduced, which enabled ETI to transition from offering individual products, to providing comprehensive solutions for the protection of electrical installations. With the development of PV fuses, we have become pioneers in the field of renewable energy protection.

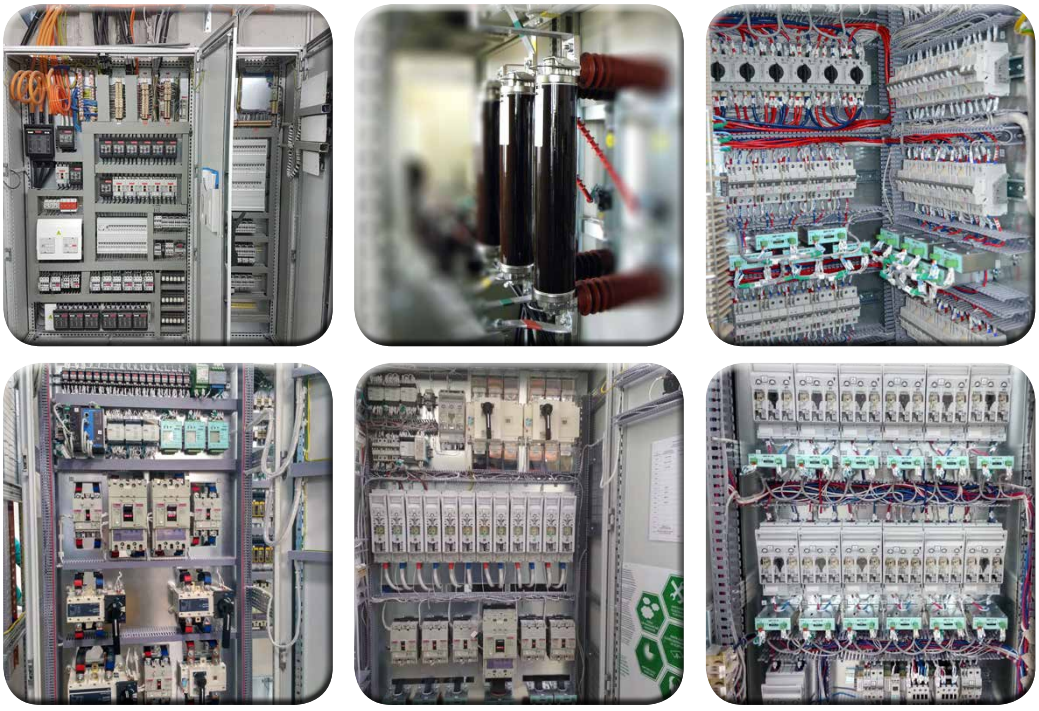
# 2010-2020:

Brand new automated assembly line EFI-P



One of the robots on the NH fuse assembly line

In 2020, the ETI Group employs more than 1,900 people, and sells its products in more than 75 countries around the world. We remain among the five largest fuse manufacturers in the world, and one of the niche producers of innovative switches and circuit breakers. Our products (fuses and circuit breakers) cover the entire range of use from 0.5A to 6300A. We can offer individual products and product lines, or complete solutions for the control and protection of residential, commercial, and industrial installations, and the distribution of electricity, photovoltaic systems, and other renewable energy sources. Of course, we must not forget the products of technical ceramics, tools, devices, and plastic products. During this period, we also got a new owner and became a limited liability company. The last decade has brought great technological progress, in the form of the adoption of the principles of lean production and the automation of production lines. We also upgraded the group's offer with design, consulting services, and turnkey solutions. We managed to create an internationally competitive, developmentally capable and stable business group, the growth of which was not stopped by exceptional competitive pressures and this year's extraordinary situation. We will continue to build the future on a quality offer of a complete range of products and services, on strengthening flexibility and competitiveness, on winning new products, and we will continue to invest profits in knowledge, the market, and technological development.



ETI's products in action

Various areas of electrical installations, protected by ETI

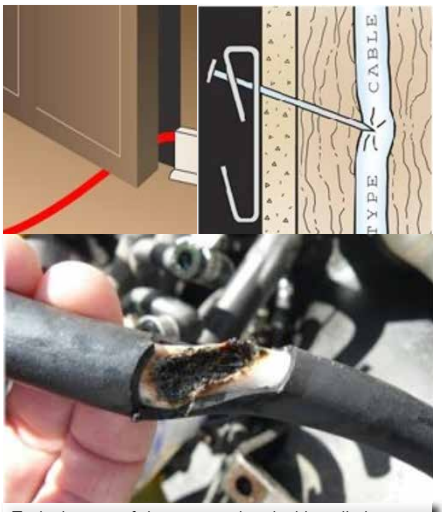
Aljaž Smrkolj, Matija Strehar

# New Series of Arc Fault Detection Devices

When reviewing fire statistics, we cannot ignore the fact that faults in electrical installations are very often stated as the cause of fires. Electrical installations are protected by overcurrent and residual protection. Why do fires still occur?

According to the ACPDR (Administration of the Republic of Slovenia for Civil Protection and Disaster Relief), every sixth fire, or an average of 250 fires per year, is a result of a fault in electrical installation.
Installations are protected by:

- overcurrent protection elements (fuse links, circuit breakers),
- residual current devices (RCDs),
- overvoltage protection, etc.




Typical cases of damage to electrical installations

Obviously, there are other faults in electrical installations that are not detected by these standard protection elements. Such faults may include: poor connection between two conductors, poor connection of the conductor and the electrical device, a trapped or damaged conductor, a partially broken conductor, etc.
Such faults result in a harmful electrical arc (faulty electrical arc).

This problem and the development of protective devices for fire prevention were first tackled in North America. The reason lies partly in their way of constructing buildings and carrying out electrical installations, where a fire can occur even faster.

Europe followed more than ten years ago. The IEC 62606 (2013) standard and an EN-standard were created, i.e. also SIST EN 62606 (2014). The product was named AFDD (»arc fault detection device«). We translated this into Slovenian terminology as »obločni detektor« or »arc detector«. In daily practice, the term spark detector can also be found. In German, this product was called the »Brandschutzschalter«, a fire protection circuit breaker. This is why a special symbol (flame) is usually found on these products, although this symbol is not a standard label.

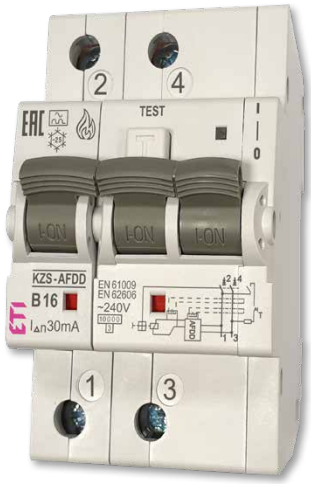
National regulations for the implementation of electrical installations are changing. In the adaptation of electrical installations or the implementation of new electrical installations in Germany, the use of arc detectors is mandatory in public institutions such as: museums, kindergartens, schools, nursing homes, hospitals, factories that use combustible substances (paper, wood industry), and public buildings (airports, railway stations).
In some other countries, use is only recommended or highly recommended.

The arc detector can be a stand-alone product but it is usually combined with an already known protection device (MCB miniature circuit breaker (ETIMAT), RCCB residual current circuit breaker (EFI) or RCBO residual current circuit breaker with overload protection (KZS)). The first and third combinations are the most common on the market, i.e. MCB + AFDD or RCBO + AFDD.

The task of the arc detector is to detect the formation of an arc in electrical installations. This is realised in such a way that the built-in electronics constantly detects the flow of electric current and electrical voltage and detects the high-frequency distortions that are the characteristic of an electric arc. In the event of their occurrence, the protective device must trip. The conditions and tripping times are determined by the above-mentioned standard. In large currents, these times are very short, only about 100 ms.

There is another fact, however: sparks that are not harmful also occur in electrical installations, e.g. on the brushes of various electrical machines. The built-in electronics must be able to distinguish between harmful and harmless sparking, otherwise the unwanted tripping of protective devices will occur.

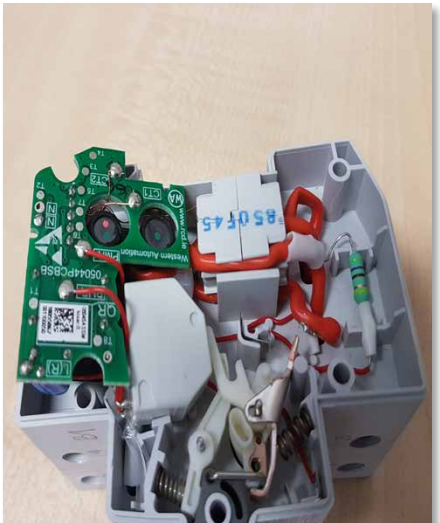
In Europe, the first protective device with an added arc detector was manufactured by Siemens. Later, products began to appear from some other large manufacturers: Eaton, ABB and Hager. This year, ETI is entering the market with its own solution as well.




The new KZS-3M AFDD product

The product covers rated currents of 6–32 A, characteristics B and C and a rated residual current of 30 mA; it is a type A residual current circuit breaker.

The device was developed based on the existing KZS-3M RCBO, with the first two modules intended for thermal and electromagnetic protection, and the third module reserved for the residual part and electronics for arc detection in the installation. We developed the arc detection system in cooperation with a European partner who has many years of experience in the development of various electronic circuits.



New product with a complex electronic circuit

The KZS-AFDD 3M2p circuit breaker thus combines the protection functions of three protective devices (miniature circuit breaker, residual current circuit breaker and arc fault detection device) and protects the installation against:

- short-circuits and overload currents,
- residual currents (fault currents),
- harmful arcs.

The product can be connected (power supply) at the top or bottom. The connection of the line (phase) and neutral conductors is also optional (left or right connection terminal).

It is important to add that the product has a built-in function of periodic arc detection self-testing (immediately after switching on and then once every minute). If the test is negative, the device trips immediately.

In addition to protection and tripping in the case of an electric arc, the device also detects and trips in the event of an overvoltage (> 270 V).

If tripping occurs due to a fault in the installation, the product indicates the cause of the tripping with the appropriate LED signalling (25 seconds after switching on again).

KZS-AFDD is also suitable for use in IT systems, which is a condition for the sale of the device to a Norway, where our major customer Garo operates.

A special demonstration case was also developed for the purpose of product promotion and the practical demonstration of operation.

The regular production started in April and KZS-AFDDs are already available in stores across Europe.

| | Stanje / Condition / Bedingung | LED signalizacija, vsakih 1,5 sek. / LED signalisation, each 1,5 sec. / LED Signalisation, jede 1,5 Sek. | po 25 s / after 25 s / nach 25 s |
|---|---|---|---|
| 1 | | ● ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ... | ● ● ● ● ● ● ... |
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| | Brez napake / No fault / Kein Fehler | ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ... | ● ● ● ● ● ● ... |

Different signalling for different faults in the electrical installation


Demonstration case



Sabina Pešec, MSc

# Sales people graded highest,

## sales process with poorest performance

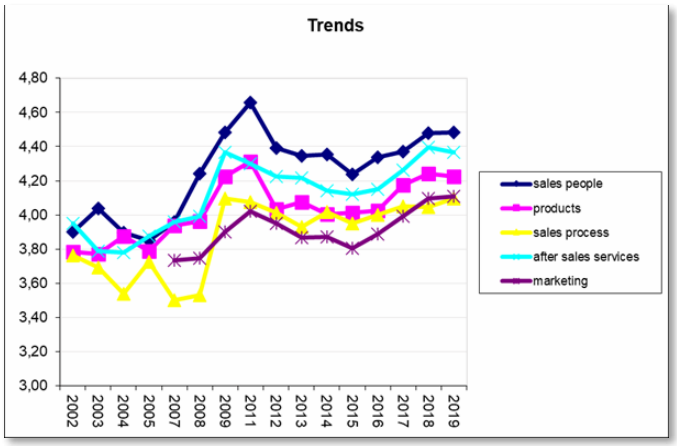
ETI's customer satisfaction survey has a long history. First performed in 2003 it has come from personal interviews in paper form to the modern web version in 15 different languages that is in use today. And the first thing our 17-year analysis shows is that ETI is constantly improving. On the other hand, this analysis is a great tool to identify areas, which require our additional attention.


This year, we have sent our survey to 4.367 respondents, out of which 497 fulfilled our questionnaire. Like in previous years, our customers have graded us higher than our competition. Our most important asset remains our sales people, who were graded highest, while the lowest (yet still high) grade was given to our sales process. Competition was best graded for their products and after-sales services.

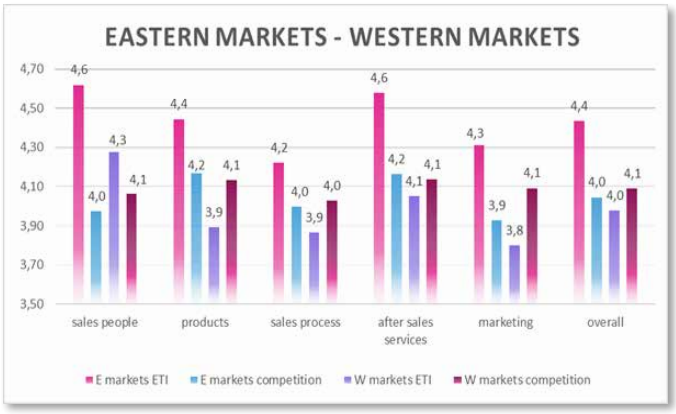
Over a period of 17 years, we recorded an increase in our grades in all categories, but most evidently in sales people. This confirms we are on a right track, although the several-year growth trend seems to be slowing down in recent years. For 2019 this was mainly due to the fall in grades in Western Europe and the countries outside Europe.

As grades tend to vary among different markets, it is always useful to see, how they compare. In the eastern market areas (Slovenia, Eastern Europe and the Balkans), we received better grades than the competition in all fields, while in Western Europe and the countries outside Europe, only for sales people were higher than that of our competition.

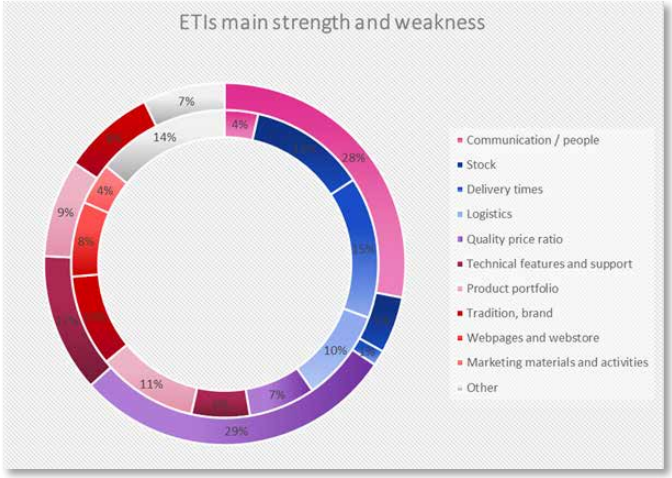
Customer grades in the Eastern and Western market areas have traditionally differed, but this year we can see a significant difference - this time the competition in both market areas is assessed very similarly. This is a clear signal that ETI will need to do more for the needs of Western market areas and even consider a tailored transfer of certain good practices from Eastern to




Western markets.
A recent novelty in our analysis is a detailed review of the answers to open-ended questions of what our customers see as ETI's biggest strengths and weaknesses.




As can be seen from the above graph, our customers perceive the relationship between the quality and price of our products as our strongest advantage, and the relationships and partnership we form with them are next in line. Our main weakness in 2019 was in the area of the sales process (problems with inventories, delivery times and logistics together accounted for a high share, 37% of responses). One good news is that compared to 2018, there has been an increase in the proportion of people who think ETI's advantage is a strong brand and tradition - but at the same time an even higher proportion of customers who think this is our biggest weakness. Of course, the former mostly come from the eastern market areas and the latter (but not all) from the western ones. In any case, this part of the analysis certainly gives us an especially good basis for reflection and deciding on long term directions.



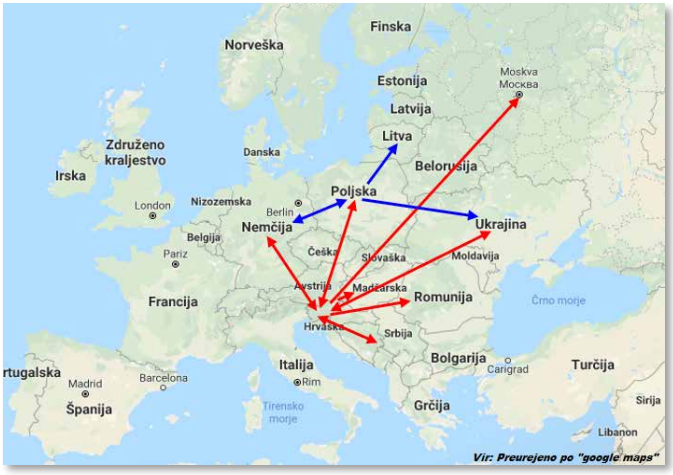

The grades presented in above graphs are of course overall assessments of individual fields, while our detailed analysis delves deeper into each field to identify ETI's good practices and existing and potential pain points, which need to be addressed. We take a look at how individual segments of our customers (electricians, panel builders, electrical designers etc.) in various market areas assess individual fields, which products they miss in our portfolio and if they need any additional support from our marketing departments. The latter are all open-ended questions which, through the use of our CRM platform, enable direct activity toward fulfilment of individual requests. Survey results for countries, where our subsidiaries are operating, are also sent to these subsidiaries, so they may take appropriate measures if required. Every year, our customer satisfaction analysis is also presented to the general management.



Sebastjan Lazar

# Overview of direct transports within the ETI Group

A detailed analysis of the existing direct transports within the ETI Group was performed as part of one of the regular logistics-oriented Six Sigma projects, which are systematically carried out in our parent company. The purpose of the detailed analysis was to find possibilities for even greater optimisation of logistics costs at the level of the entire ETI Group. It was found that in our Group, in theory, direct transport can be performed in 210 cases. Out of these, in 27 cases, direct transport or business already takes place (at least in part), and in 183 cases it does not yet. The largest share of direct transport within all transport is held by the parent company ETI, d.o.o., namely 71%, followed by Eti Polam with 36%. Direct transport in all other subsidiaries holds a share of less than 30% of all transport. The image below shows a map obtained via the Google Maps application, of countries where direct transport already takes place (at least in part). Red arrows show existing direct transports involving at least one company from Slovenia. Blue arrows show existing direct transports where companies from Slovenia are not involved.



Domen Kos

# ETI's new website

The internet is becoming the town square for the global village of tomorrow (Bill Gates). The internet has been the most important sales channel for some time. Anyone who ignores it is written off, or at least well on his or her way to being eliminated or destined to play a marginal role in the international business arena. This applies to any company that operates globally. ETI is no exception.

Our previous website was fine, but it was technologically and design-wise obsolete. That is why we closed ranks and rolled up our sleeves in Marketing and Product Management. After working hard practically the whole year round, the result is a modern new website on a completely new state-of-the-art platform.

The redesign was well-thought-out and comprehensive. We first set about redesigning the corporate (English) page, i.e. the www.etigroup.eu domain, which is already available online. Other language versions, including the Slovenian one (www.eti.si), will be set up gradually, meaning that the Slovenian version is probably not yet available at the time you read this.

We conducted an analysis of user behaviour on the existing website, and combined this experience with new trends in the user experience. The result of these queries and features is a completely revamped main search engine that now operates based on suggestions, and uses completely new search terms facilitating the search process for users.

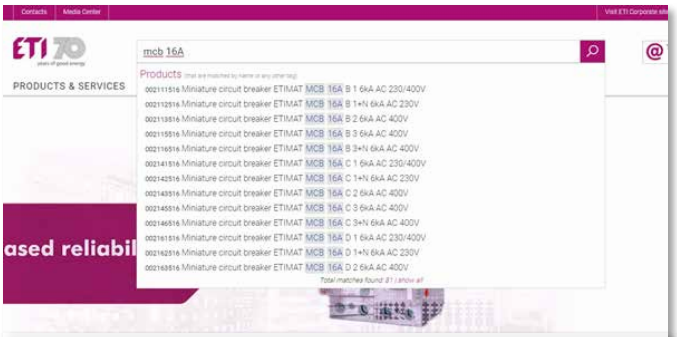



Figure 1: Search process using a search engine

Another important novelty is the main menu search option, which displays the image of a typical product (Figure 2).

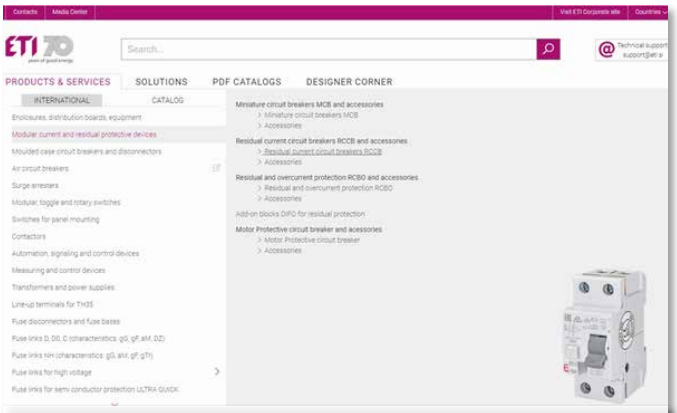



Figure 2: Product image when searching the main menu

The process of filtering the desired technical attributes has also been renewed. Filters are sorted by relevance for each product group, and they enable multifunctional search and intuitively help the user to choose the desired product.


Figure 3: Filtering of technical attributes


Figure 4: Product level and technical characteristics provided

Product Management also took an active part in redesigning the website, as significantly more technical information is now available for our products, which helps users to select the appropriate product (Figure 4). More than 15,000 codes were upgraded with additional technical parameters that are important in selection and evaluation. This is a very important step towards the digitalisation of our product base, which will prove to be a step in the right direction for entering digital marketing (e-commerce) in the near future.

Of course, there are many more novelties in terms of functionality, as only the most noticeable and prominent are stated above. We also devoted a lot of attention to the graphic image (design). The first and definitely the most important novelty on the new website is the so-called responsive design, allowing automatic adjustment of the content for different resolutions (screen sizes). The website therefore adapts, depending on whether you visit via mobile, tablet, or PC. One platform thus satisfies the requirements of all resolutions.

The new platform offers a lot of freedom to play with the layout of the page itself. We decided to integrate modern wide-range banner ads that support video content, so that the website is dynamic, as soon as a user visits the page. As for the design – beauty is in the eye of the beholder, so I leave the decision as to whether the new design is appealing or not to you, dear readers. Once again, you are kindly invited to visit www.etigroup.eu.

Sabina Pešec, MSc

# Anže Jerman,
## our new product manager for Special Purpose Fuses

**Please briefly describe your educational and career path and your more important achievements to date.**

I started my educational path at the Upper Secondary School of Electrical Engineering in Ljubljana. Even in primary school, I showed an interest in electrical engineering, as there was almost no battery-powered toy that I would not disassemble to see what was inside. My father got mad, saying that I always have to destroy everything :). After graduating from upper secondary school, I continued my education at the Faculty of Electrical Engineering. At the end of my first year of study, I started thinking about what I was going to do after graduation, so I applied for a company scholarship call that was available at ETI and was selected. This is where my career began, so I spent the time when we didn't have study activities working at my summer job at ETI. I can say that this was time well spent, as I got to know the employees and the products we make so the transition to a full-time job later was not too difficult. I started working at ETI in the development of electrical products and later, after reorganisation, in the Department of development and technological support for the production of fuses. While working, I made the decision to continue my studies at the second-cycle master's study programme in electrical engineering. I continued my studies full-time, so I only worked at ETI occasionally through a student referral at the time. After completing my study obligations, I returned to my old job. In development, I continuously worked in the field of fuses. I first took part in the development of fuse-switch disconnectors and fuse bases, and later in the development of photovoltaic cylindrical fuse-links. Since October, I have been employed as Product Manager for Special Fuses.

**What can you tell our readers about your private life? (hobbies, views on life, family...)**

I come from Šmartno pri Litiji, which people I talk to notice quite quickly because of the way I speak,:) I was born 27 years ago and I am the youngest next to my brother and sister. I have to say that my parents were quite lucky, as there were no major problems with me as a child and even later during school. I remember, as a child, being able to keep myself busy, preferably with Lego, which I could build all afternoon. They were probably the reason why I later became fascinated with engineering. I like to spend my free time in nature. If the opportunity arises, I like to go on a mountain trip, and in winter I regularly visit the white slopes. I am actively involved in the local volunteer fire brigade and sports club.

**How are you adjusting to the new role of Product Manager for Special Fuses? Was the transition difficult?**

Every transition is tough in a way, but over time, a person gets used to everything :D. My experience from my previous job has been of substantial help, and somehow I can't imagine coming to this job without previous experience in fuse technology.
I think working in development was a good send-off for this job, as I got to know the products there, learned a lot about the technology, which is quite specific in the field of fuses, and just got to know the organisation of the Company. As Product Manager, I now combine one with the other, but I still learn something new every day. My colleagues, who I can turn to at any time, are of great help here.

**Which new tasks are most up your alley and which ones do you find the most difficult?**

It seems to me that I most enjoy finding new solutions to the problems our customers are facing. There is a lot of customisation and coordination in the special fuses area before the product hits the market. Introducing new solutions on the market means a lot of cooperation, consultation and coordination between different departments in our Company. Which tasks are the most difficult, however, is hard to say, as each task presents a new challenge.

**Where do you see the main opportunities and challenges in the field of special fuses? How will we face them?**

The name »Special Fuses« itself indicates that this is an area where opportunities arise, but they need to be sought. This is why it is necessary to constantly monitor the market and listen to the problems that our customers are facing. The main opportunity for special fuses is to adapt to the end customer with solutions that are not available elsewhere on the market. With a solution that is flexible for the end-user, the end product can have a higher added value. The challenges that await us are in finding potential solutions that would be of interest to the market and that will bring some benefit to the Company. However, special solutions must be used with caution, as not every idea or solution is always an opportunity for success, and information from the market is often scarce in special applications. Nevertheless, in the future, we will probably need to be a little more confident with an idea and be among the first on the market, as the first ones usually scoop the cream.

**There is a lot of talk about progress in ETI, about the changes in recent years. How do you look at it?**

How it was ten or more years ago is hard to say because I was still studying at the time. However, I can say that I came to ETI at a time when a lot of attention was being paid to the introduction of automatic lines. Great progress has been made here, as quite a few new automatic lines have been introduced into production in the last five years. I think this is the right path, as it is currently one of the ways to maintain the range of products with lower added value. There is also progress in the organisation of the Company itself. I maybe wish that in the field of new product development, we would sometimes step into a project with a little more boldness, as innovations lead to the success of the Company. Otherwise, in general, I think we follow trends and adapt to the environment in which we operate well.

**Would you like to say anything else to our readers and your coworkers?**

We must not be afraid to face new challenges, as they represent an opportunity for progress. Let's find joy in our work and ensure a good atmosphere in the work environment, and we will all benefit from it. And don't forget that sometimes just a smile and a kind greeting can brighten someone's day :).

Melita Klemen

# Sweet energy – the recipe book that inspires

I have long been thinking about how to present ETI to its business partners in a somewhat different, less conventional way. Truth be told, our company operates in an exceedingly "mature" and conservative industry. Energy always has been, is and will be present, as we also wrote in the introduction to the book. To counterbalance this element of permanence, we wanted to add something new, some freshness. And this is exactly what we did with regard to our business gift. We created something new and fresh, something ETI has never had before – a recipe book.


And what does a recipe book have to do with ETI, you might ask. On the one hand, nothing, because we are not a company that is active in the culinary arena. However, if we look at things from a slightly different perspective, the connection is much more extensive than you might first think. The book we have designed is the product of a marketing approach in which both we and our business partners were involved. And that was exactly our purpose. To include our business partners in the very process of creating the book. To turn this into a way to deepen our relationship. And as a result, we now have a useful, innovative gift. Our business partners were happy to respond to our invitation to co-create the book. But how did they do that, exactly? Simple – they each sent us a recipe that is typical of their country. In this book, we limited ourselves to Europe only, considering that we are, after all, a European manufacturer. You could say that we have brought Europe closer, united it even – all under one roof.

The title of the book is: Sweet energy, Made by ETI and partners.

Allow me to explain the title:

**Energy** – because our company is unequivocally connected with it (most of our business gifts also fall into the energy category).

**Sweet** – because we decided to make a book of desserts (the book came out in early December, coinciding with the festive holiday season, and because desserts give us a feeling of familiarity and festivity, regardless of when we make them).

**Made by ETI and partners** – because it was created together with our business partners.

The recipes in the book are sorted by country. First, there is a two-page introduction (mostly with photos) of the country, followed by a recipe for the chosen/submitted dessert.

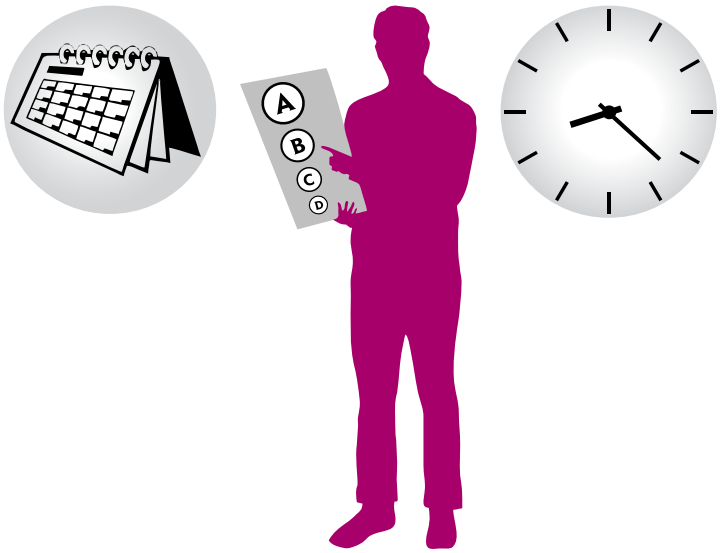
Naturally, Slovenia is "positioned" first.

Clearly, we are all familiar with our country, because it is our home, after all. There were so many ideas that we had difficulty deciding which photos to use. Regardless, we chose Bled as the cover photo (each country gets a cover or main photo and several smaller ones). We might have had differing views regarding the photos, but we were of one mind when it came to choosing the dessert – it had to be orehova potica (walnut cake). Everybody knows it well, it is present in every corner of our country, and it is truly one of a kind. Considering that most of us housewives have tried to bake one before – some more successfully than others, perhaps this book will encourage others to try their hand at baking it.

We launched this mini "create a book" project with a clear goal of what kind of book we wanted. We also knew how to achieve it. Mr Miloš is the designer who helped to guide us with his culinary and travel experience, making this project even more exciting than it would have been otherwise.

# Orientation towards common goals and results

**Common goals of ETI group are our highest priority. We achieve agreed goals with all our energy, ambition, dedication and passion.**



I set priorities and organize my time optimally.

I involve competent employees in finding solutions.

I persevere on the way to the goal and overcome obstacles.

I accept responsibility for my decisions.

I keep a tidy workplace and do not pollute the environment.