

REPORT ON COLLECTIVE PURCHASE CAMPAIGNS DEVELOPED IN SLOVAKIA, THE SUCCESSES AND THE LEARNINGS

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ABOUT CLEAR-X

Consumers Leading the EU's Energy Ambition Response, Expansion (CLEAR-X) is an ambitious extension of a tried-and-tested methodology, designed and developed to address consumers' needs thus **enabling consumers to lead the energy transition by investing in renewable energy sources (RES) and energy efficient (EE) technologies**.

The project covers some of the [countries](#) where financial, administrative/regulatory and technical barriers were most often perceived by the consumers during their journey to RES technologies.

These countries, Bulgaria, Cyprus, Lithuania, North Macedonia, Slovakia & Slovenia, were therefore selected for the potential impact of introducing collective purchase schemes, geographic diversity compared with similar past projects, and the presence of suitable consumer organisations.



There are four specific objectives:

- Reliable information on RES and EE technologies suitable for consumer's homes is available
- Consumers collectively invest in suitable RES technologies through trusted schemes
- Consumers receive relevant information and advice on RES and EE technologies
- Regulatory frameworks facilitate consumers' adoption of RES and EE technologies and relevant market offers

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CAMPAIGNS SPECIFICATION

CAMPAIGN #1:

Product	PV panels
Campaign Calendar	Registration: 17 Oct 2022 to 31 Jan 2023 Offer: 22 Nov 2022 to 31 Jan 2023
Campaign Landing Page Link	https://www.spolocnenakupy.sk/fotovoltika/

CAMPAIGN #2:

Product	Heat pumps air-water
Campaign Calendar	Registration: 30 May to 31 Oct 2023 Offer: 30 May to 31 Oct 2023
Campaign Landing Page Link	https://www.spolocnenakupy.sk/tepelne-cerpadla/

SOS organised two Collective Purchase Campaigns (CPC) with the aim of securing EE and RES investment at better prices and purchase conditions, quality installations for all consumers, who'd sign up to participate in the CPC.

CAMPAIGN 1: PV PANELS MARKET RESEARCH ANALYSIS

SOS conducted an in-depth analysis of the Slovak photovoltaic (PV) market and the existing networks of PV suppliers in preparation for the collective purchase campaign, officially launched in October 2023. This marked the first CPC organized in Slovakia and the inaugural CPC for SOS.

The PV professionals in the Slovak market were categorized into several groups:

- Online shops exclusively selling PV and/or solar panels without providing installation services.
- Business companies offering comprehensive PV system installations, with pricing determined individually after a home visit.
- Small installers without online shops, specializing in specific types of PV panels, hesitant to switch to other brands or models not already contracted for supplies.

The largest group among PV professionals was comprised of small installers, often lacking an online presence and relying on recommendations from satisfied customers.

SOS initiated the invitation for PV suppliers to join the PV CPC and prepare offers for consumers in June 2022 through various channels, including media, its website, and social media platforms. An email containing CLEAR-X project details, an invitation to participate in the PV CPC, and a list of tested PV panels was sent to all PV suppliers registered with the Slovak Innovative and Energy Agency as certified suppliers for state subsidies.



Navigating the specifics of the PV market proved challenging. Selecting the most credible and verifiable PV suppliers with a history of tested panels in stock, a network of installers across Slovakia, and favourable contract conditions was a complex task. Consideration had to be given to the diverse characteristics of households, such as different heating, electricity, and hot water systems, roof types, and geographical orientations.

Approval from a third party, the grid operator, was required for PV systems on house roofs. The market analysis also considered whether potential suppliers could assist households with the administrative process for officially connecting to the grid. Selected suppliers were expected to facilitate administrative procedures to obtain government subsidies in the form of vouchers, covering part of the final price.

Guaranteeing prices for PV panels, delivery, and installation presented a challenge amid fluctuating energy prices, with suppliers not publishing their price lists online, potentially leading to price changes on a weekly basis.

Another external factor was the persistent reluctance of distribution companies to connect households to the grid. Legal periods for connection were absent, conditions varied across regions, and changes were frequent.

PRODUCT TEST RESULTS

After conducting extensive market research, SOS initially chose to test two specific PV panel models:

- LONGI LR4-72HPH, with a peak power of 455 Wh
- HT-SAAE HT60-166M, with a peak power of 370 Wh

In addition to these two models, SOS also reviewed other PV panels tested by various organizations through ICRT. Subsequently, SOS finalized a list of 12 products available in the Slovak market. Notably, LONGI secured the 2nd position, and HT ranked fifth in the overall assessment.

Based on the outcomes of these tests, SOS compiled and circulated a list featuring high-performing PV panels that had a significant presence in the Slovak market. This information was shared with all potential suppliers for their consideration when preparing their offer for the campaign. The list included:

- CANADIAN SOLAR CS3W-460MS
- HT HT60-166(PD)-F-370
- Hyundai HiE-S485VI
- JA Solar JAM72S20-460/MR
- Jinko Solar Tiger Pro JKM440M-6TL4-V
- LG LG400N2T-J5
- LONGI LR4-72HPH-455M
- LONGI LR4-60HPH-370M



- Q-Cells Hanwha Q.PEAK DUO ML G9.4 390 Wp
- SHARP mono half-cell NU-JC 370 Wp
- Solaredge SPV375-R60DWMG - 375 Wp
- Trina Solar Vertex TSM-400DE09.08

From the extensive array of products initially considered, SOS narrowed down its recommendations to a select few products for the potential suppliers, prioritizing those with the most favourable test results. During the first phase, sixteen suppliers showed interest in participating in the CPC, initiating direct negotiations with seven companies. Ultimately, SOS received offers from five suppliers.

After careful evaluation, SOS opted for the LONGI 455, one of the two products initially recommended for testing, based on its outstanding test results. However, the offer for HT 370 was declined due to its limited suitability for installations in specific regions of Slovakia.

Furthermore, SOS accepted a second offer for the JA Solar 460, recommended by another consumer organisation, as it ranked third in the comparison conducted by SOS. Both the chosen LONGI and JA Solar models demonstrated the highest efficiency in the PV panel category.

NEGOTIATION

Approximately 420 suppliers listed with the Slovak Innovative and Energy Agency received email invitations from SOS. Sixteen of these suppliers showed interest by seeking more information and considering participation in the CPC. Additionally, SOS promoted the CPC invitation through various channels, including forums, events, the Slovak Association of Electricity Suppliers, and the Slovak Association of Photovoltaics.

Negotiations with suppliers took place through both online and offline meetings after they were informed about the CPC conditions and considered joining. In the end, SOS received seven different offers of varying quality.

The main obstacles for suppliers to join the CPC included the total number of completed installations they needed to have in stock for a specified period, the obligation to offer the product with professional installation nationwide, and the availability of tested models on the market. Suppliers provided different discounts based on their price lists.

Ultimately, SOS selected the two best offers, each featuring a model tested by SOS and another tested by a different organisation. One offer was more expensive per 1 kWp of installed power due to a hybrid inverter that included a physical battery. The cheaper solution offered a standard inverter with the option to connect to a virtual battery. The second supplier also offered assistance to help consumers find virtual battery providers.

The main consumer benefits included discounts ranging from 10% to 20% per 1 kWp of installed power, with gradual additional discounts for larger installed power. Additionally, both suppliers accepted vouchers issued by the state agency to partially cover the price, which was beneficial for the registered consumers.



The selected offers guaranteed the requested amount of PV panels and technical equipment in stock, assistance with the administration of grid connection and state subsidy requests, and the complete installation of the PV system within three months from approval by the distribution company. Consumers had the choice between two offers – one with a physical battery and one with a virtual battery for electricity storage.

After negotiations, SOS prepared Cooperation Agreements, which were separately concluded between SOS and each supplier, along with a template for the contract of work to be concluded between the supplier and the consumer for the purchase and installation of the photovoltaic system. SOS also ensured the suppliers' compliance with contractual terms through contractual penalties and confirmed that the contracts with consumers did not contain unfair terms.

CAMPAIGN CONTENT & PROMOTION

SOS implemented various measures to support and inform consumers throughout the PV CPC campaign.

A call centre was contracted to provide additional assistance, and the campaign's landing page included CPC Frequently Asked Questions (FAQs), along with useful tools like an online calculator to estimate household savings with a PV system over time. Practical articles discussing the benefits of PV systems, potential savings, and environmental advantages were also featured.

To enhance communication between interested consumers and SOS, the organisation established a dedicated email address to address consumer inquiries about the campaign and products, providing assistance with any issues that arose.

SOS also conducted a press conference at the campaign's launch and distributed multiple press releases. Regular articles were added to the [SOS website](#), shared on social media platforms (Facebook, Instagram, Twitter, and YouTube), and included in newsletters.

A special PV CPC newsletter was distributed to subscribers, and campaign information was integrated into the regular newsletter and the newsletter and website of the Slovak energy regulator. Invitations to join the CPC were extended to various authorities, institutions, consumer and NGO organisations, municipalities, and other networks.

Collaborative articles focusing on PV benefits, legal and technical limitations, and PV CPC were published on [euractiv.sk](#). Promotional videos and interviews were broadcast on national and regional TV stations, complemented by radio and video advertisements on national radio and TV. Articles were published in national and regional newspapers, and the PV CPC campaign was promoted at specific sectorial fairs. Leaflets and promotional materials were produced and distributed during workshops.



CONCLUSION

The table below presents the goals (KPIs) versus the results achieved.

	Goal	Achievement
Engagement	3,000	1,798
Sales/Installations	350	100
Average cost per installation	4,000€ ¹	4,000 - 8,000€*
Page Visits	-	33,706

**This amount varied based on the amount of kW to be installed (3kW-10kW)*

Barriers

A horizontal consideration to keep in mind is that SOS' objectives for their CLEAR-X campaigns were defined prior to the war in Ukraine and energy crises, which contributed to a different political and economic landscape, influencing the outcomes of SOS' efforts.

In addition, a series of challenges and complications further impacted the results of the PV CPC:

- The unexpected death of the initially selected supplier shortly before signing the cooperation agreement created uncertainty in whether another supplier would be interested in participating to the campaign. Luckily, launching the online registration without a confirmed supplier encouraged others to express interest, which ultimately led to the final selection mentioned above. Following offers were even more attractive for consumers as the first one.
- The sudden disruption of state subsidies during installations phase required the selected suppliers to adopt an online "first-come-first serve" system, registering households with signed contracts to be able to fill their obligations to get subsidy they counted with already. Even so, they finally managed to successfully register the majority of consumers from our CPC and handled the remaining cases on an individual basis.
- Regulated electricity prices in 2023 and the absence of financial incentives for selling excess electricity back to the grid slow down the consumer motivation to invest in PV systems. Moreover, physical batteries continue to be expensive, costing approximately 5,000 euros. Virtual batteries are not financially advantageous for all households, and the contracts offered by their providers do not adhere to consumer protection legislation, being designed in favour of the providers.
- An unforeseen aspect was that households from the Bratislava region were excluded from state support scheme. This led to complaints from consumers from the Bratislava region, as they were unable to combine both benefits – the CPC discount and the voucher for state subsidy – unlike households in other regions.
- Finally, one of the most significant complications arising from distribution companies, which lack legal timeframes for connecting consumers to the grid. These companies employ various excuses and create complications to prolong the process. They may request different technical or building modifications, apply distinct forms and criteria across regions, and leverage the lack of network capacity as a limitation

¹ This average cost was determined based on national data available at the time of writing the project proposal in 2020.



whenever and wherever possible. There was national regulation prepared by Slovak energy regulator, which should unify and define timeframes and procedures of connecting process in Slovakia, but as it was not published in public legal register on 01/01/2024, it is not in force and unfortunately, there are currently no tools available in the market or within Slovak legislation to encourage better behaviour from these distribution companies.

It is worth noting that despite offering the opportunity for all three major traditional electricity suppliers to participate in the PV CPC, they expressed no interest. However, a few months later, two of them initiated campaigns, presenting strikingly similar models of group purchases for PV.

Certainly, another significant aspect to highlight is the challenges faced in researching the professional history of suppliers or obtaining references for their previous work. This challenge becomes more pronounced, particularly for suppliers from other countries, such as the Czech Republic, who are actively present in the Slovak market.

Lessons learnt

It is essential to continue to advocate for re-opening of the state schemes with less complex criteria. The schemes should be long-time predictable, because consumers are doing big investments, need to plan well ahead and must be sure if and when they can actually rely on state subsidy.

Households considering investment into PV systems need economical motivation, so it is essential to continue to lobby for better price of the electricity from sun sent back to the grid, for lower taxes, lower distribution fees and much faster and easier connectivity to the distribution grid.

For consumers, but also installers, it is very useful to develop and prepare approved consumer contract templates for installation of PV to avoid legal mistakes or possibly unfair contract terms, and to ensure the deadline of the installation.

Not only guaranteed prices for PV panels, but also guaranteed price for installation and guaranteed period of delivery time and installation date after the contract was signed, is a huge advantage for consumers.

As this is still very new technology supported by EC, there are more and more conspiracy theories and hoaxes regarding the low lifetime or possible home fires caused by PV panels. As political support of green transition and RES is unstable, it will be crucial to prepare for the national pro-gas and nuclear legislative approach, which will try to dismiss the relevance of green transition and renewables in general.

Due to various reasons mentioned above it is essential also to continue in media communication to call the government to improve this situation and also to join forces with PV suppliers, their professional associations and also for example environmental NGOs to achieve the climate goals.



Satisfaction Survey

A satisfaction survey was sent to consumers in September, to understand their experience throughout the campaign and gather valuable insights for future similar activities. Below we summarise the key feedback points:

- **High prices** of the selected photovoltaic panels: 27% of respondents found the prices to be excessively high.
- **Low interest in the investment:** approximately 16% of respondents found the return on the investment too long.
- Mixed feelings about the campaign: while 35% of the respondent were very/satisfied with the process, 63% reported that they would not recommend this campaign to other consumers.
- 82% of the respondents agreed that the website's information was useful in helping them decide.

CAMPAIGN 2: HP AIR-WATER MARKET RESEARCH ANALYSIS

Before launching the CPC, SOS conducted an analysis of the heat pump market in Slovakia. The purpose was to identify suitable types of products for laboratory testing and to find and select suppliers with the best offers.

In the spring of 2023, SOS launched promotional activities to encourage suppliers to register for the campaign and submit offers through media advertisements. SOS also reached out to all suppliers registered in the Slovak Innovative and Energy Agency as certified suppliers for state subsidies for heat pump installations. Approximately 300 emails were sent, inviting heat pump suppliers to join the upcoming CPC.

Additionally, SOS collaborated with the European Heat Pump Association (EPHA) and requested their headquarters to connect with their members operating in Slovakia who might be interested in the campaign.

Main highlights

The Slovak heat pump (HP) market is segmented into manufacturers, retail sellers, sellers with their own network of installers, and installers who also supply products. The key for SOS was to find a supplier with tested heat pumps in stock and its own network of installers covering the entire Slovakia.

While there are a few heat pump manufacturers in Slovakia, this sector is rapidly growing due to substantial investments. However, these manufacturers were not interested in participating to the CPC as contractual obligations with larger companies, which sold their products, led to significant delays in their current orders. Moreover, they lacked the human and technical capacities to extend their offerings to consumers registered with the CPC.

Similar to the situation with photovoltaic (PV) panels, small installers in the heat pump sector preferred working with their chosen models. They were reluctant to switch to other brands and faced extended waiting times due to pre-contracted orders for the next season.



Several reputable companies withdrew from negotiations with SOS due to the complexity of CPC for heat pumps: each household's unique characteristics, including renovation needs, energy mix, consumption patterns, and geographical locations, posed challenges in offering and installing a single type of tested heat pump to a large group of consumers. Moreover, suppliers were aware of the approximately 6-month waiting time for state agencies to pre-pay subsidies after the completion of installations. This presented a significant financial risk, particularly for smaller companies.

Finally, Slovakia lacks a tradition of collective purchases for goods or services. The first one was SOS's PV panels campaign, making suppliers generally unaware of this concept. Suppliers did not know the benefits of these campaigns, did not consider this model trustworthy and feared complications.

PRODUCT TEST RESULTS

SOS sent the model PANASONIC AQUAREA J WH-MDC09J3E5 for testing and participated in the testing programme of the following models:

- PANASONIC AQUAREA J WH-UD07JE5 + WH-SDC0709J3E5
- Daikin Altherma 3 R - ERGA08EVH + EHBH08E6V
- Atlantic ALFÉA EXTENSA A.I R32 526 333 +

After receiving the test results, SOS sent a list of all tested heat pumps to suppliers to invite them to send possible offers for the CPC:

- Ariston NIMBUS PLUS S NET R32 - 3301888
- Atlantic Fujitsu ALFEA EXTENSA A.I R32 526 333 +
- Daikin Altherma 3 R - ERGA08EAV3H + EHBH08EF6V
- Panasonic AQUAREA J WH-MDC07J3E5
- Panasonic AQUAREA J WH-UD07JE5 + WH-SDC0709J3E5
- Toshiba Estia HWT-801HW-E + HWT-1101XWHT6W-E

Please refer to the charter below for more information:



Excerpt from the test results

Producer	Ariston	Atlantic Fujitsu	Daikin	Panasonic	<u>Panasonic</u>	Toshiba
Type	internal and outdoor unit	internal and outdoor unit	internal and outdoor unit	only outdoor unit	internal and outdoor unit	internal and outdoor unit
Total results Evaluation	6.	3.	5.	2.	4.	1.
Evaluation Difficulty Installation	3.	6.	5.	2.	4.	1.
least harmful Environmental impact	6.	2.	5.	1.	4.	3.

SOS had to decline few suppliers because they offered heat pumps that were not on the list of tested products. The organisation chose to select two products tested, both Panasonic models, based on their favourable test results, availability in the Slovak market during the CPC duration, and receiving competitive offers for both the products and their installation.

Comparing the obtained offers and selecting the best one posed a significant challenge for SOS due to the limited number of tested heat pumps to choose from. Additionally, the comparison was complicated by the harsh winters in Slovakia, necessitating heat pumps with superior performance even in temperatures as low as -15 degrees Celsius. Unfortunately, it was not possible to test and compare this aspect for all the heat pumps under consideration.

NEGOTIATION

SOS reached out to approximately 300 HP suppliers, including a representative from EPHA, to invite them to join the CPC. The CLEAR-X project and its activities were presented to 11 interested suppliers through online or offline meetings to provide more information about the campaign and procedures. In the end, SOS received six offers from different suppliers.

Suppliers reported to SOS the following main limitations to joining the CPC:

- The expectation to guarantee a specific number of 200 heat pump installations within a specified period.
- The obligation to offer the product with installation services throughout the entire country (Slovakia).
- A very limited list of tested heat pump models that they don't typically sell.

In their offers, HP suppliers promoted discounts compared to their price lists, longer warranties for the device and/or installation, and the acceptance of vouchers issued by the state under the funding scheme supporting RES technologies. Some offers were limited to specific regions of Slovakia, while others had a low number of



installations available. Ultimately, SOS selected one supplier with two offers for two tested models of Panasonic – monobloc and bi-split.

The winning supplier guaranteed 200 installations, each to be completed within three months from the day the contract was signed, which was a crucial condition. Additionally, the winner accepted vouchers issued by the state to cover part of the total price (approximately 3,600 euros at that time). This was highly relevant because the process to register for and receive the state subsidy is lengthy, and suppliers had to pay VAT on that part of the total price in advance.

Main consumer benefits

SOS successfully negotiated a 25% discount for both selected types of heat pumps, a significant reduction compared to the market prices at that time.

The chosen offers also guaranteed a maximum ceiling price for the installation, agreed at 1,200 euros, with a variation of approximately 10% for every household, calculated precisely after a home visit by the installer. This condition was highly beneficial and attractive for consumers, as installation costs are typically not specified upfront, and consumers usually discover the total price only after a home visit or later following the installation. The warranty for both the heat pump device and the installation service was extended, contingent on consumers meeting predetermined conditions. These conditions were agreed upon and communicated prior to the contract's finalization.

Once the negotiations concluded, SOS prepared and finalized a Cooperation Agreement with the selected supplier. The supplier agreed to use a template for the Contract of work prepared by SOS, which was to be concluded between the installer and the consumer for the purchase and installation of the heat pump. SOS ensured supplier compliance with contractual terms through contractual penalties, and the contracts with consumers did not contain any unfair terms or conditions. A clause about Alternative Dispute Resolution (ADR) and Online Dispute Resolution (ODR) systems available in Slovakia for potential consumer disputes was also included.

CAMPAIGN CONTENT & PROMOTION

SOS contracted a call centre to offer additional support for consumers, besides the Frequently Asked Questions (FAQs) about the CPC and other useful tools such as an online calculator, both included in the campaign's landing page. In particular, the calculator helped consumers determine if an air-water heat pump was suitable for their specific household and, if so, estimate the potential savings in both Euros and CO₂ emissions. Practical articles were also provided on how to select the correct type of heat pump, along with a terminology dictionary and additional information about heat pumps, potential savings, and their environmental benefits.

Furthermore, SOS established a dedicated email address to answer consumers' questions about the campaign and products, assisting them with any issues they encountered.

To generate interest among consumers and maximize registrations to the CPC, SOS organized a press conference in the beginning of the campaign, distributed a press release and started to campaign through regular articles added to its web site www.sospotrebitelov.sk, on Facebook, Instagram, Twitter, YouTube and Google.





SOS disseminated a special heat pump CPC newsletter to its subscribers, incorporating information about the HP CPC into both regular newsletters and those of the Slovak energy regulator. The invitation to join the CPC was also extended to Slovak subscribers by the Czech consumer organisation dTest. In collaboration, a series of articles dedicated to HP benefits and HP CPC were prepared and published on euractiv.sk. Promotion videos and interviews were broadcasted and disseminated online across seven [regional TV channels](#). A radio advert ran on national radio for two weeks, and a group of articles was published by national and regional newspapers. The HP CPC campaign was further promoted on two national television channels and several radio stations.



Záujem o tepelné čerpadlá rastie. Ako ho môžete získať ešte pred zimou?

SEP 10, 2023 | AKTUALITY, CLEAR-X, SOS



Majitelia rodinných domov sa do konca októbra môžu bezplatne on-line zaregistrovať do skupinového nákupu tepelných čerpadiel a získať ho so zľavou, aj s inštaláciou, už do dvoch mesiacov.



Additionally, SOS produced a leaflet and other promotional materials, distributing them during workshops to promote the project and CPC.

CONCLUSION

The table below presents the goals (KPIs) versus the results achieved.



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	Goal	Achievement
Engagement	3000	381
Sales/Installations	250	7*
Average cost per installation	8,000€ ²	6,500€
Page Visits	-	12,818

**There are 120 intentions to purchase. However, these did not materialize into signed contracts with the suppliers due to the momentary interruption of the state scheme. The relaunch of the scheme was foreseen one month after the end of the campaign.*

Barriers

After the launch of the online registration for the HP CPC, SOS encountered several external barriers that demotivated consumers from registering and participating in the CPC, and even the green transition in general.

1. The state support unexpectedly ended shortly before the HP CPC started, creating an important disincentive for consumers. The investment ranging between 12,000 and 6,000 euros for an air-water heat pump was more appealing with the approximately 3,600 euros state subsidy. The state agency managing the scheme suddenly announced that the dedicated budget had been fully spent, and another call would open in September. Since the CPC was initially intended to conclude before summer, consumers opted to wait, and only 5 contracts under the HP CPC were signed by the time of this report. Although there is another state scheme for heat pumps available, it requires combining the state subsidy with insulation, making it incompatible with the HP CPC organised under the CLEAR-X project.
2. Additionally, regulated electricity prices were in place for 2023 and will continue in 2024. This fact has reduced consumers' enthusiasm to switch to heat pumps, particularly compared to 2022, when concerns about rising gas prices due to the conflict in Ukraine prompted interest in RES technologies such as heat pumps. There is no financial motivation for HP owners, as the electricity price in Slovakia is still approximately three times higher than the price of gas. Moreover, there are no other benefits for prosumers, such as tax incentives, lower distribution fees, or better prices for electricity sent to the grid either.

Lessons learnt

Throughout the preparation and implementation of the campaign, SOS gathered useful lessons learned. In particular:

- It is crucial to advocate for the reopening of schemes with less complex criteria and ensure their predictability, especially considering that consumers are making significant investments and need to plan well in advance. Ensuring the availability of state subsidies is essential for households considering the high-cost investment needed for heat pumps, and lobbying the government to change the difference in electricity and gas prices in favour of electricity becomes a priority. Collaborating with heat pump suppliers to jointly advocate for favourable pricing conditions is valuable.

² This average cost was determined based on national data available at the time of writing the project proposal in 2020.



- To assist consumers (and installers), the development and preparation of an approved consumer contract template for heat pump installations can prevent legal mistakes and ensure fairness.
- Guaranteeing prices not only for heat pumps but also for installation, along with a guaranteed period for delivery and installation after the contract is signed, provides substantial advantages for consumers.
- Given the novelty of this technology and the limited independent and reliable information available, obtaining data and experiences directly from the field is valuable. Conducting a mystery shopping exercise for air-water heat pumps in 10 households, albeit by coincidence, provided practical recommendations for installers. These insights were later shared with installers during a workshop.

Satisfaction Survey

As for the CPC for PV panels, a satisfaction survey was also sent to consumers for this campaign on HP. Although only 28 consumers answered the survey, we are sharing the feedback received below:

- **High prices** of the selected photovoltaic panels: 25% of respondents found the prices to be excessively high.
- **Low interest in the investment:** approximately 18% of respondents found the return on the investment not substantial enough.
- **Shortage of available recommended models:** some of the respondent were not satisfied with the proposed models.
- Mixed feelings about the campaign: while 43% of the respondent were very/satisfied with the process, 60% 63% reported that they would not recommend this campaign to other consumers.
- 71% of the respondents agreed that the website's information was useful in helping them decide.

