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USAID EMPOWER PRIVATE SECTOR ACTIVITY – IN PARTNERSHIP WITH SIDA SECOND KOSOVO GREEN FESTIVAL

Contributors: Trim Tërnavë and Argjira Krasniqi, Energy Experts



Business visitors obtaining offers for photovoltaic (PV) solar panels at one of the exhibitor booths.

September 19–21, 2017

This document was produced for review by the United States Agency for International Development and the Swedish Agency for International Development (Sida).

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1. GREEN FESTIVAL OVERVIEW AND RESULTS

1.1. Festival Purpose

The Kosovo Green Festival is an initiative of the USAID EMPOWER project with the primary purpose of (i) promoting the growth of Kosovo green business markets to expand sales and jobs for their local suppliers; (ii) advocating for policy, legal, and regulatory improvements needed for green business growth; and (iii) expanding public awareness of the benefits of adopting green practices and technologies, including ways for citizens to support environmental sustainability.

The “green” sector covers a wide range of businesses in renewable energy, energy efficiency, and recycling. It offers substantial opportunities for economic growth and job creation, mostly in business that is entirely domestic. Successful business examples in Kosovo include production of biomass fuel pellets, collection of waste plastic for reprocessing into greenhouse covers, reprocessing of used motor oil, production of solar PV panels, insulation material production, and manufacturing of energy-efficient doors and windows (in which even the flat glass residual is locally recycled by a third party into decorative wall tiles).

Despite notable opportunities for growth in the future, numerous challenges—beyond issues related to the policy and regulatory framework—are also evident. Government policy improvements are critically needed in the near future to stimulate renewable energy generation, energy conservation, and recycling. Without significant policy changes, the green industry will struggle to leverage its full potential.

The USAID EMPOWER project has successively organized the **Green Festival** for the past two years. The first edition took place May 25–27, 2016, alongside the EXPOKOS Fair 2016, which is a multi-sector trade show that has taken place for the last 16 years. The second iteration of the festival took place September 19–21, 2017. The three-day festival was entirely an EMPOWER initiative, meant to bring together key private- and public-sector stakeholders engaged in clean and renewable energy. The second edition of the Green Festival was expanded in terms of the number and quality of exhibitors, forums, visitors, and media coverage. Similar to the first Green Festival, USAID and ProCredit Bank were the principal sponsors for this year’s event.

1.2. Festival Program

Green Festival Opening Ceremony

The grand opening of the second Green Festival was highlighted by speeches from U.S. Ambassador **Greg Delawie**; Minister of Environment and Spatial Planning **Albena Reshitaj**; National Coordinator of the Millennium Challenge Kosovo Office **Petrit Selimi**; and CEO of ProCredit Bank **Ilir Aliu**. Deputy Mission Director for USAID/Kosovo **Mike De La Rosa**; Program Officer from the Embassy of Sweden in Pristina **Fatos Mulla**; and CEO of Procredit



Ribbon cutting: USAID Deputy Mission Director Mike De La Rosa, Minister Albena Reshitaj, and CEO of ProCredit Bank Ilir Aliu were present.

Bank **Ilri Aliu** were present for the ribbon-cutting ceremony.

The opening day of the second Green Festival was covered live by Klan Kosova, Tribuna Channel, RTV 21, Kosova Press, and TV Dukagjini, and was also heavily featured on the main news of RTK1, RTV 21, and Klan Kosova.

The principal activities of the Green Festival were the **Green Pavilion**, **Green Forums**, and “parallel activities.” In the **Green Pavilion**, **23 local companies** involved in renewable energy, recycling, and energy efficiency products displayed their products to the public. Over the course of the three-day festival, exhibitors tracked around 2,000 visitors and signed 39 new sales contracts amounting to **€1.3 million**. Of the 39 contracts, exhibitors finalized 25 during the fair, reaching an estimated €735,000 in sales, while 14 contracts, worth an estimated €600,000 in sales, are still under negotiation. Additionally, exhibitors identified 88 “hot leads” and connected with 457 valuable contacts.



Green Pavilion: Visitors at the Elen booth. Elen signed the first contract early on the first day.

As part of these results, the following successes are particularly noteworthy: the deal between Elen¹ and Eling for a 400-kw solar project worth €300,000; Bau Energy’s negotiation for exports to **Egypt** amounting to an estimated €97,000; Tiki Mosaic’s² sales contract in **Albania**; and an interested buyer from **Switzerland** for industrial kitchen products produced by the Kosovo-based company Jasini.³



Green Festival September 2017: Well attended forums

This year’s **Green Forums**, a unique and well-attended component of the Green Festival, attracted **208** attendees, including energy-sector professionals from the private and public sectors; representatives from donor organizations and local and international financial institutions; students; and green energy fans from various professional backgrounds. Over the two days of the Festival, speakers from reputable international renewable energy

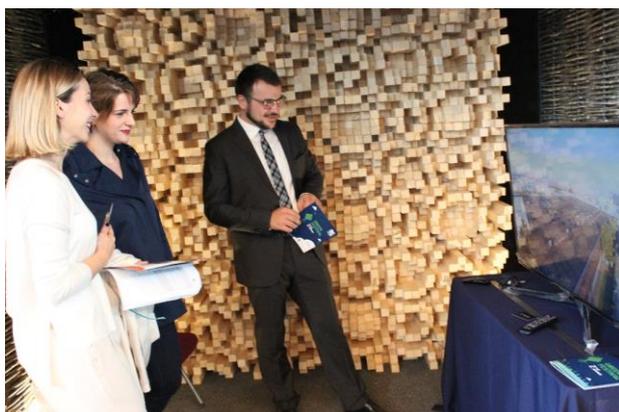
¹ Elen specializes in the design and installation of electrical systems. The company also provides services related to solar energy, BMS & Amp, smart home systems, technical consultancy, and energy efficiency solutions.

² Tiki Mosaic is the first glass recycling company in the country, producing mosaic glass tiles and crystal mosaics.

³ Jasini manufactures appliances for professional kitchens.

organizations such as **Solar Power**, **IRENA**, **DNVGL**, and **AEG** presented the latest EU and international trends in PV solar technology, prices, support schemes, and financing models. Overall, the Green Forum included eight thematic discussion slots on clean energy, recycling, and energy efficiency featuring **25 speakers**, 13 of whom were from outside Kosovo.

For the first time in Kosovo, there was a presentation on energy services company (ESCO) models. A Croatian model was presented, and local legislation related to the ESCO model was elaborated by a local expert. The use of sustainable materials in buildings and recycling proved to be an attractive topic, and presentations made by **KIVO**, **Anarch**, and **Bonevet** evoked interest and admiration among audience members. The Mayor of Prishtina **Shpend Ahmeti**, together with representatives from the Ministry of Environment and Spatial Planning, **GIZ**, and businesses focusing on recycling, discussed key issues and opportunities facing the recycling business in Kosovo. Researchers and energy-efficiency building experts discussed the possibilities and benefits of low consumption buildings.



Green Festival: Anarch improvised auditorium using sustainable materials, “n’shpi te re” documentary raised high interest from visitors



Green Festival: Bonevet corner, Executive Director Leke Zherka.

In the Green Pavilion, EMPOWER set up “parallel” activities to encourage public awareness and engagement in environmental sustainability and the “circular economy.” **Bonevet**⁴ set up a space showcasing their 3D printers, solar lights, and electric car/working stations, attracting 250 visitors. Approximately 40 of these visitors expressed interest in attending Bonevet’s program in Pristina, while 10 companies said they were interested in cooperating with Bonevet. **Anarch**⁵ built an improvised “auditorium” using recycled and sustainable materials. The auditorium was also used to showcase the environmental documentary “N’shpi te re,” which is the story of how the premises of national TV station Klan Kosova were built using recycled materials. This showcase generated a lot of interest among visitors. There was also a **voting box** using recycled materials, including plastic bottles. ProCredit Bank (PCB) also used a bicycle generator to promote renewable energy.

EMPOWER also organized parallel activities at Zahir Pajaziti Square to highlight the sustainable use of natural materials. At the square, two architects Blerim Lutolli and Argjira

⁴ Bonevet is a “maker space” training provider that offers a wide range of practical, hands-on courses, especially for youth.

⁵ Anarch is a leading architectural firm in Kosovo, known for its use of recycled materials in its projects.

Krasniqi constructed a temporary space using only textiles, wood, and rammed earth. The space was designed as a reading corner and solar phone charging station, and promotes renewable energy, recycling, and the sustainable use of materials. The technique of rammed earth/seats was used for the first time in Kosovo. Due to weather conditions, staff had to shift recycling activities planned with kids to the Boro Ramizi Youth Center.



Multifunctional structure: Solar phone charging station and reading corner with rammed earth seats. Constructed by Blerim Lutolli and Argjira Krasniqi.



Solar charging station and rammed earth seats—a first in Kosovo. Constructed by Blerim Lutolli and Argjira Krasniqi.

1.3. Green Festival Media Coverage

The second edition of the Green Festival received extensive media coverage and social media attention. EMPOWER produced and distributed numerous promotional materials, which are detailed below, to relevant stakeholders during the festival. Solar Power Europe, one of Europe's leading solar-sector organizations, featured the festival on its website.⁶

In Kosovo, major national TV stations, including RTK, RTV21, Klan Kosova, and KTV, featured numerous TV advertisements and interviews on the Green Festival. Additionally, 17 online news portals covered the festival.

⁶ <http://solarpowereurope.org/index.php?id=962&ADMCMDCooluri=1>.

Green Festival – Second Edition - Communication Activities

Email Marketing

- Sent Save-the-Date emails in three languages to 2850 stakeholders and contacts one month prior to the festival through the info@empowerkosovo.org email address.
- Sent save-the-date email with agenda in three languages to 2850 stakeholders and contacts through the www.mailchimp.com email marketing platform one week in advance.
- Sent and invitation email with agenda in three languages to 2885 stakeholders and contacts through the work email addresses of the communications team one day before the festival.

Print & other

- A 4.00mx9.60m wall banner was placed on a wall near the Green Festival venue and popular New Born sight for three weeks, up to the end of the festival.
- 150 Green Festival posters were distributed to relevant energy sector stakeholders including cafes and restaurants one week in advance.
- 500 Green Festival flyers were distributed at cafes and restaurants one day before the festival.
- 300 Green Festival catalogues showcasing the 23 green companies that were present at the festival were distributed during the three days of the festival.
- 100 branded T-shirts were distributed during the Green Festival.
- 200 branded cloth bags were distributed during the Green Festival.
- Sent Press Release in three languages to USAID for sending to media.
- Took over 1500 photos during the event and posted a selection on the Green Business Kosovo Facebook page with short summaries/blurbs. Photos were also sent to USAID for posting.

Web

- Electronic banner was featured in the www.gazetaexpress.com web and mobile news portal for four weeks up to the last day of the festival.
- News on the festival was posted on the EMPOWER website in three languages.

Facebook

- The opening of the festival and all forums were streamed live on the Green Business Kosovo Facebook page and shared on the EMPOWER Private Sector Facebook page.
- The Green Business Kosovo Facebook page statistics as of end of Q13 are:
 - 1,930 page Likes/followers
 - 68,398 reaches (from all posts)
 - 15,926 post engagement (likes, comments, shares or clicks)
 - 18,665 video and live stream views

Green Festival – Second Edition - Communication Activities

TV & Radio

- TV advertisement on the Green Festival ran on RTK1, RTV21, Klan Kosova, and KTV during prime-time shows from September 14 - 20.
- Organized for the Job Creation Team Leader together with company representatives, and energy experts to appear on the TV afternoon program BonBon in RTV 21 (Sep 15), and on the morning programs in RTK1 (Sept 16), KTV (Sep 16), and Klan Kosova (Sep 18), to promote the Green Festival.
- Klan Kosova posted the interview on their Facebook page and has over 5K views: https://www.facebook.com/Ora7Official/videos/1107081952761148/?hc_ref=ARSz_Mp6m3Gx0zq8OgCkiQlj-NUrhpsTKgK4n02uh21GeCrMasoFgEapaW1h4rhSYU
- The interview at KTV was posted on Youtube and has over 120 views: <https://www.youtube.com/watch?v=jEWR7smieL8>
- The Job Creation Team Leader was interviewed on Radio Kosova on the morning of the opening of the festival.
- The opening of the Green Festival was shown live on RTK1 TV channel. Footage from the festival and an interview of the EMPOWER COP and company representatives was also shown on the program. RTK1 transmitted live from the festival on the second day also.
- Klan Kosova, Tribuna Channel, RTV 21, and KosovaPress were present at the opening and all covered the ceremony and VIP visit of the Minister of the Environment and Spatial Planning, USAID Acting Mission Director, and Procredit Bank Kosova CEO.
- A story on the Green Festival by Tribuna Channel was shown on their TV morning program: <https://www.youtube.com/watch?v=G4EEg00iwhk->
- The Reload program in TV Dukagjini reported live from the Green Festival on the first day. The video has over 300 views on YouTube: <https://www.youtube.com/watch?v=YUS8LaYnC4E>
- News on the opening of the Green Festival was also featured on the main news of RTK1, RTV21, and Klan Kosova: <http://klankosova.tv/hapet-festivali-i-gjelber-video/>
<https://www.rtklive.com/sq/news-single.php?ID=200189->
<http://rtv21.tv/edicioni-dyte-festivali-te-gjelber/>

Online news portals:

1. <http://www.ekonomiaonline.com/nacionale/festivali-gjelber-edicioni-dyte-thekson-bizneset-e-gjelbra-te-kosoves/>
2. <http://www.albinfo.ch/festivali-dyte-gjelber-kosoves/>
3. <http://www.koha.net/arberi/45184/festivali-i-gjelber-sensibilizim-per-kursim-te-energjiise/>
4. <https://telegrafi.com/hapet-festivali-bizneseve-te-gjelbra/>
5. <https://telegrafi.com/fillon-festivali-gjelber-synon-ngritjen-e-vetedijes-per-ruajtjen-e-energjiise/>
6. <https://telegrafi.com/ambasadori-amerikan-mesazh-per-festivalin-e-gjelber-video/>
7. <http://indeksonline.net/ekonomia/hapet-festivali-i-bizneseve-te-gjelbra-128109/>
8. <http://infosot.com/festivali-gjelber-sensibilizim-per-kursim-te-energjiise/>
9. <http://gazetablic.com/festivali-qe-thekson-bizneset-e-gjelbra-te-kosoves/>
10. <http://gazetablic.com/hapet-festivali-bizneseve-te-gjelbra/>
11. <https://www.gazetaere.com/hapet-festivali-i-bizneseve-te-gjelbra/>
12. <http://www.kosovapress.com/sq/ekonomi/festivali-i-gjelber-senzibilizim-per-kursim-te-energjiise-130926/>
13. <https://www.gazetaere.com/green-festival-synon-te-rrise-tregjet-e-biznesit-ne-kosove/>
14. <http://www.kosovapress.com/sq/ekonomi/hapet-festivali-i-bizneseve-te-gjelbra-130900/>
15. <http://lajmi.net/tag/festivali-i-gjelber/>
16. <http://www.botasot.info/kultura/761231/festivali-i-gjelber-senzibilizim-per-kursim-te-energjiise/>
17. [http://www.gjuhashqipe.com/sq/Ekonomi/Ambasadori-amerikan-me-mesazh-p%C3%ABr-%E2%80%9CFestivalin-e-Gjelb%C3%ABr%E2%80%9D-\(Video\)](http://www.gjuhashqipe.com/sq/Ekonomi/Ambasadori-amerikan-me-mesazh-p%C3%ABr-%E2%80%9CFestivalin-e-Gjelb%C3%ABr%E2%80%9D-(Video))

2. PHOTOVOLTAIC SOLAR ENERGY FORUM

2.1. Solar Photovoltaic Trends: Prices, Technology, & Storage

Panel composition:

- **Stuart Brannigan**, Managing Director, AEG, Today and Tomorrow. Topic: A view on the future of photovoltaic solar technology
- **Przemyslaw Chodura**, Grid Integration Expert for Renewable Energy and Savings, DNV GL. Topic: Energy conservation in renewable systems
- **Michael Taylor**, Senior Analyst, International Renewable Energy Agency (IRENA). Topic: Cost assessment and competitive potential of renewable energy sources in southeastern Europe (SEE)
- **Lulzim Sylja**, Energy Expert (moderator)

Conclusions:

- Technical potential for renewable energy in the SEE, according to a recent IRENA report, is 740 GW.
- Currently, there is a gap of 8.2 GW from reaching the overall renewable energy target by 2020 for SEE.
- Energy transition will result in larger fluctuations in supply and load. Fluctuations and their uncertainty put pressure on the reliability of electricity supply.
- The combination of solar and storage energy has advantages that allow the application to be used as a tool to “flatten” the curve (daily diagram, and up to provision of ancillary services to transmission system operators (TSOs)).

2.2. Photovoltaics Support Schemes: Best European Practices and the Kosovo Case

Panel composition:

- **Thomas Doring**, Policy Analyst for Technology and Market Trends, Solarpower Europe. Topic: Current support schemes for photovoltaic systems in Europe
- **Ymer Fejzullahu**, Head of Pricing and Tariff Department, Energy Regulatory Office (ERO). Topic: Support schemes for photovoltaic technology
- **Ardian Berisha**, Deputy Chief of Party, USAID Repower Kosovo. Topic: Approximation and acceleration of legal and regulatory framework for RES in Kosovo
- **Krenar Bujupi**, Energy Expert (moderator)

Conclusions:

- Currently, there are two forms of support for power generation with photovoltaic (PV) technology:
 - Assignment of priority in dispatching for all generators using such technology
 - Financial support
- Best known forms of financial support are feed-in tariff, premium tariff, own consumption support scheme, green certificate, VAT reduction, fiscal incentives, and investment grants, among others. These support schemes differ from country to country, and are closely related to actual installed capacities and the condition of countries' electro-energy systems.

- Currently, Kosovo has the following support schemes:
 - A feed-in tariff of 136.4 €/MWh, with a power purchase agreement of 12 years
 - Generators' own-consumption support schemes
- Participants discussed further steps, since all targets that are part of the support scheme were reached. Panel members, as well as the audience, mentioned that ERO must continue to work on developing policies to support renewable energy through feed-in tariffs, premium tariffs, or auctions. They must strive to maintain a balance between promoting such technologies and defending the interests of consumers.
- ERO must operationalize, as soon as possible, the One-Stop Shop project to facilitate the procedures for obtaining consent in a timely manner.

2.3. Funding Renewable Energy Projects

Panel composition:

- **Thomas Doring**, Policy Analyst on Technology and Market Trends, Solarpower Europe. Topic: "Solar bankability" project
- **Besim Islami**, Energy Expert. Topic: Project funding
- **Trim Tërnavaj**, Energy Expert (moderator)

Conclusions:

- Solarpower Europe has developed a guideline of best practices in risk identification, assessment, and mitigation for PV energy projects.
- Technical risks may greatly impact the general risk assessment scheme of a project.
- The occurrence and influence of technical risks on various business models vary, depending on the size of systems, technology, geographic location, and climatic conditions.
- Technical risks may be systematically organized in a risk matrix.
- There are several options to economically assess technical risks, thereby distinguishing Critical Path Method (CPM), Levelled Cost Analysis (LCOE), and cash flow categories.
- The cash flow model is more sensitive to risks in the early phases of a PV project.
- Mitigating measures to prevent risks, or measures that allow for early discovery of risks, are most effective.
- A professional risk management strategy is integral to any PV investment.
- Key parameters in renewable energy sector (RES) projects are:
 - Simple Payback Time (SPT) – The ideal would be less than 10 years for a RES project, though that differs between countries and may take up to 10–15 years.
 - Debt Service Cover Ratio (DSCR) – Usually in the margins of 1.2–1.5
 - Project Internal Rate of Return (IRR) – over 10 percent
 - Project Net Present Value (NPV) – equivalent to at least 25 percent of the investment
- Investors must pay much attention to project design, namely the feasibility study.
- Investors must better elaborate the project for it to be more comprehensible to the bank for financing.

2.4. ESCO Model

Panel composition:

- **Darije Josic**, Chief Financial Officer, SENSE ESCO Ltd. Topic: ESCO model
- **Lovre Ristevski**, Banking Relations Manager, Crimson Capital, Energy Efficiency and Renewable Energy Funding. Topic: Success of WebSEFF II and the new European Bank for Reconstruction and Development (EBRD) Western Balkan Project for Green Energy Funding (WB GEFF)
- **Avni Sfishta**, Project Manager, Kosovo Energy Efficiency Project, GIZ. Topic: Legislation and options for the energy service market in Kosovo
- **Trim Tërnav**, Energy Expert (moderator)

Conclusions:

- ESCO is an internationally recognized business model.
- ESCO projects are characterized by investments in reconstruction, replacement, or modernization of existing facility technology, by implementing energy-efficiency measures.
- ESCO company clients gain savings without investment and without financial risk.
- EBRD has supported several ESCO projects as part of its WEBSEFF II project.
- In October 2017, EBRD's newest project, WB GEFF, will begin.
- For the project, there is already an allocation of €85 million for lending, which is designed to support energy efficiency and renewable energy investments in the residential sector in the Western Balkans, which includes Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Montenegro, and Serbia.
- For Kosovo to establish a market for ESCO companies, new legislation on energy efficiency must be adopted (complemented with secondary legislation that clearly and specifically allows for the establishment of ESCO models).
- The following contract models must be drafted and approved:
 - Energy performance contract
 - Energy service contract
 - Savings division contracting
- Energy management and energy optimization service management systems must be developed.
- An energy savings monitoring and verification system must be developed.
- A system for human capacity development must be developed.
- A market for consultancy services and project management services must be created.

3. RECYCLING FORUM

3.1. Successful Recycling Examples in Kosovo

In this panel, three different Kosovo-based companies presented their successful recycling projects.

Panel composition:

- **Ariel Shaban**, Chief Business Development Officer, KIVO. Topic: Closed loop recycling system

- **Astrit Nixha**, Owner, Anarch. Topic: Reconstruction of buildings with recycled materials
- **Lekë Zherka**, Project Coordinator, Bonevet. Topic: 3D printers

Conclusions:

- Plastics are widely used in many industrial sectors, including construction, medicine, electronics, transportation, and packaging, among others.
- The linchpins of plastic recycling and the use of recycled plastics in the industry are:
 - The ability of the state to employ institutions and private-sector companies to establish facilities for plastic waste collection
 - Consumers', both individuals and companies, willingness to buy recycled products
- According to the Kosovo Agency of Statistics, 2,600 tons of plastic are recycled in Kosovo. Incidentally, Kosovo imports about 2,500 tons of clean plastic granules per year for manufacturing needs.
- The demand for recycled plastic granules is quite high in the Kosovo and Balkan markets. While the majority of recycled granules currently comes from EU countries, plastic recycling production in Kosovo is appealing due to low labor costs and the reduced cost of transportation.
- KIVO's recycling plants are working to turn Kosovo into a Balkan leader in the manufacture of recycled granules, both in terms of quality and capacity: recycled plastics could become one of Kosovo's major exports. This would help the country's economic development by generating new jobs, and it would also positively impact the environment and reduce the amount of discarded plastic.
- Recycling would provide an opportunity for the country to re-use materials from old or abandoned facilities to renovate or build new facilities at low cost.
- There are shortcomings in the practical, hands-on training of students in schools and universities, as well as a lack of awareness related to the importance of recycling. As such, Bonevet created a platform to provide practical work and experience in the manufacturing of recycled products.

3.2. Waste Recycling and Public Awareness on Environmental Sustainability

Elias Messinas of ECOWEEK discussed waste recycling and public awareness of environmental sustainability.

Conclusions:

- Through activities to promote recycling and re-use, civil society can influence societal views on waste treatment.
- Throughout the process of reusing materials, it is very important to combine technology with social inclusion.
- For projects to be successful, it is important to combine top-down (government) policies with bottom-up policies. Citizens should feel free to take the initiative.

3.3. Recycling Business in Kosovo and Job Opportunities in Green Spaces in Kosovo

The panel dealing with the topic of business environment and recycling policies in Kosovo was moderated by Kai Hofman from GIZ.

Panel composition:

- **Enver Tahiri**, Ministry of Environment and Spatial Planning. Topic: Where does Kosovo stand in terms of waste recycling market and in government policies?
- **Shpend Ahmeti**, Mayor, Municipality of Pristina. Topic: Dardania Recycles
- **Pezana Rexha**, Executive Director. Topic: Pana Architecture and Recycling firm
- **Kai Hofman**, GIZ. Topic: Development of the supply chain, waste separation at the origin

Conclusions:

- The representative from the Ministry of Environment and Spatial Planning pointed out that while there is legislation that regulates the waste sector in Kosovo, it has yet to be fully implemented.
- According to this official, the total amount of waste generated by a country with 1.76 million inhabitants is estimated to be around 0.6kg/d/inhabitant, with a total annual value of 400,000 tons.
- According to Shpend Ahmeti, the Pristina region generates enough waste to invest in major recycling projects. It is estimated that the city of Pristina generates about 130 tons of waste per day. The goal is to collect 180 tons through a better collection system. The current system does not include many neighborhoods in the existing waste collection network.
- Mr. Ahmeti also added that starting on January 1, 2018, waste collection in Pristina will be billed by the municipality of Pristina through a joint property tax bill, which will result in a better waste collection set-up. With this change, the city will be able to calculate the exact amount of waste generated by the municipality of Pristina.
- Waste from the Pristina region is deposited in the Mirash landfill in Obiliq, where conditions are substandard.
- Based on the data presented by Kai Hoffman from GIZ, individuals in the informal sector that deal with waste collection earn €4-6 per day. With the development of the Dardania Recycles project, this amount reached up to €18 per day.
- Through subcontracting methods, direct employment by waste collection companies, and business development support, the informal sector can be integrated into the formal waste management system.
- Based on data from the Ministry of Environment and Spatial Planning, 26 percent of household waste is recyclable, while the informal sector collects about 70 percent of this waste.
- The separation of household waste is the first link of the recycling supply chain (household sector).

4. ENERGY EFFICIENCY FORUM

4.1. Promoting energy efficiency in buildings

On the third day of the Green Festival, an Energy Efficiency Forum was held. The forum consisted of a panel discussion on the promotion of energy efficiency in buildings, and Pëllumb Gjinolli, an expert on renewable energy and energy efficiency, moderated it. The panel was divided into two sections. The following participants comprised the first section:

- **Alban Zogaj**, Economist, Millennium Challenge Kosovo Office/Office of the Prime Minister. Topic: MCC program in Kosovo
- **Sarah Olmstead**, Country Team Lead for Kosovo, Millennium Challenge Kosovo Office/USA. Topic: MCC program in Kosovo
- **Fatos Aliu**, Head of Planning Department, Kosovo Efficiency Agency. Topic: Efficient energy in the state/municipal context

Conclusions:

- According to MMC Kosovo, the main obstacles to Kosovo's economic development are lack of electric power, lack of rule of law, and perception of the rule of law, as well as environmental issues.
- The MMC project on energy and energy efficiency in Kosovo has three main components:
 - Review of the implementation of incentives for investments in household energy efficiency
 - Exploring the possibility of increasing the efficiency of central heating in Kosovo's cities and expanding their networks in the process
 - Supporting the removal of barriers, with a particular emphasis on banking barriers, for individual energy producers planning to enter the market
- The full transposition into the Energy Efficiency Law of the Directive 27/2012 on Energy Efficiency of the Energy Community Treaty is considered a major challenge, due to its incorporation into many of Kosovo's laws. Thus, the Law on Energy Efficiency has not yet been adopted.
- As the Law on Energy Efficiency has not been adopted, there is a lack of minimum energy performance criteria for buildings.
- The Kosovo Efficiency Agency, and particularly the project development sector and the monitoring and verification sector, face a shortage of qualified staff at central and local levels.
- Due to the lack of a database, there can be no accurate monitoring of the achievement of energy efficiency measures at municipal and national levels. Thus, energy efficiency achievements could be far higher than what might be reported.
- The first national energy efficiency plan aims to achieve 9 percent energy savings at the end-consumer level within 2018. Meanwhile, more work is required to reach the target of 3 percent stated in the second national energy savings plan.
- By law, energy efficiency offices must be set up at the municipal level.

- According to a World Bank study, there is enormous energy savings potential among buildings in Kosovo. To fully realize the potential for savings of 239 ktoe (kilo ton oil equivalent) from buildings, approximately €1.3 billion are needed.

The second section was comprised of:

- **Blerim Lutolli**, Researcher. Topic: Social housing
- **Petrit Ahmeti**, Researcher. Topic: Heat consumption
- **Bashkim Dyla**, Energy Engineer, Masters of Science in Sustainable Construction. Topic: Criteria for efficient buildings

Conclusions:

- Sustainable construction projects stimulate energy efficiency, the development of new professional staff, job creation, and the use of local materials. Along the way, these projects also create positive social, cultural, economic, and environmental impacts.
- According to Petrit Ahmeti's research, wood is the predominant fuel used for heating in Pristina, followed by central heating and electricity. Over 50 percent of residential units in Pristina use wood or electricity.
- Many homes in Kosovo, due to economic conditions, are only partially heated, and do not provide thermal comfort. Residential units that use pellets, geothermal heating, coal, and central heating can heat over 75 percent of living spaces. Residential units that use liquified petroleum gas usually heat less than 50 percent of their space.
- Households in Prishtina are increasingly using the "low E" layer on windows in Pristina, a trend which shows citizens are aware of this option.
- Due to the high average residential area per person in Pristina, we have low energy efficiency.
- Based on his research, Petrit Ahmeti created a database of 1,051 residential units in Pristina. The database can be used by other institutions or researchers.
- With proper implementation of architectural, insulation, heating, and electrical measures, great savings in energy can be achieved.