AREU member assessment



BSW

Agenda

- BSW-Solar
- AREU & BSW-Solar Cooperation
- Enquiry of the Afghan Renewable Energy Sector
- Cooperation framework of BSW-Solar with Partner Associations
- Recommendations and examples
- Work in Groups

German Solar Association (BSW-Solar)



TASK To represent the solar industry in Germany in the thermal and photovoltaic and storage sector

VISION A sustainable global energy supply provided by solar (renewable) energy

ACTIVITIES Lobbying, political advice, public relations, market observation, standardization

EXPERIENCE Active in the solar energy sector since 40 years

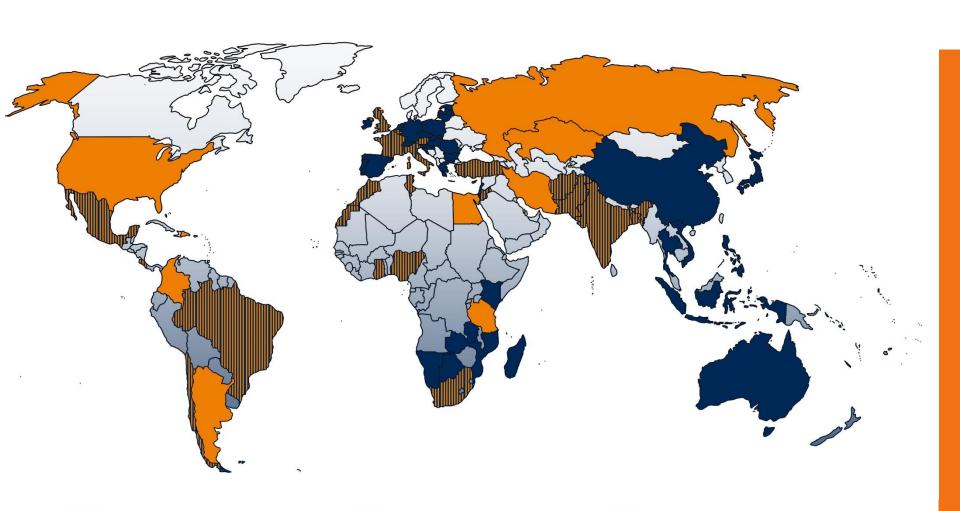
REPRESENTS More than 800 solar producers, suppliers, wholesalers, installers and other companies active in the solar business from all over the world

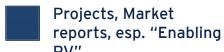
HEADQUARTERS Berlin

Equipment Materials System components Wholesale & Distribution Project Developstruction O&M

BSW SOLAR

Partnerships and projects of BSW-Solar......







Agenda



- BSW-Solar
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MoU AREU / BSW-Solar August 2016







ORANDUM OF UNDERSTANDING (MoU

UNDESVERBAND SOLARWIRTSCHAFT e.V





2.0 Agreement on operation

AREU and BSW agree together to work on promoting the use of renewable energy technologies. The two parties will cooperate in the areas of:

- Quality assurance of circulated solar products
- Capacity building
- Joint ventures of Afghanistan and German companies (business matchmaking)
- Awareness building for solar energy in both countries
- Advocacy for Afghanistan and Germany's renewable energy enabling policy, regulations, rules and incentives.

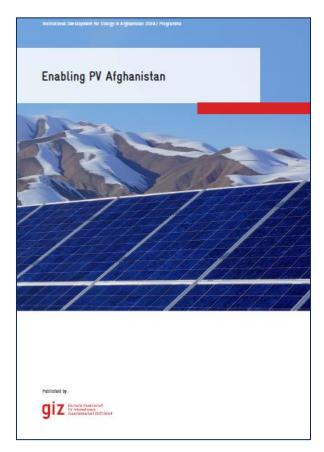
Specific projects will be developed as the two parties agree. This MoU does not imply any financial/legal obligation or liability for any of the two parties.





Enabling PV Afghanistan

- Duration: December 2016 –
 December 2017
- On behalf of the GIZ
- Partner: Afghanistan Renewable Energy Union (AREU)
- Publication of the study: June 2017



Online available: link

Content



- Reasons why to invest in Afghan PV market
- Business models for PV in Afghanistan

1. Off-grid project:

400 kW PV-Diesel hybrid plant with battery support

2. Rooftop Net-Metering project:

- 100 kW commercial plant in an urban area

3. PPA project:

- 5 MW ground-mounted PV plant connected to the grid
- Recommendations for the Afghan PV market framework

BSW SOLAR

Workshops

- January and April 2017, Kabul
 - Kick-off with BSW, AREU + GIZ
 - Stakeholder workshop at the Ministry of Energy
- June 2017 Intersolar Europe Workshop on Afghanistan / Enabling PV
- September 2017 Intersolar Middle East Workshop on Afghanistan / Enabling PV
- December 2017 Intersolar Mumbai Workshop on Afghanistan / Enabling PV







BSW SOLAR

Agenda

- BSW-Solar
- AREU & BSW-Solar Cooperation
- Enquiry of the Afghan Renewable Energy Sector
 - Q&A
- Cooperation framework of BSW-Solar with Partner Associations
- Recommendations and examples
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EvaluationAREU Members Assessment



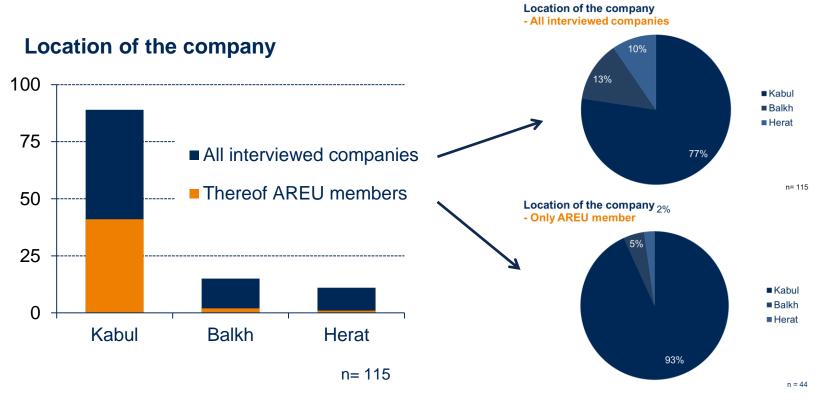
Survey period: December 26th, 2018 until January 17th, 2019

Number of companies surveyed: 115

Evaluation status: February 10th, 2019



77% of the surveyed companies are located in Kabul

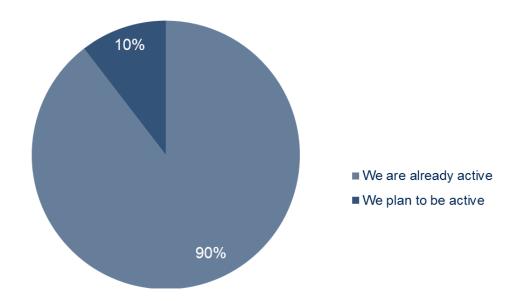


- 115 companies have been surveyed in total; thereof 89 companies are located in Kabul (77%)
- 41 of the 44 AREU members are located in Kabul; 2 in Balkh and 1 in Herat
- All companies employ a total of around 1700 persons



Interviewed Companies-Background

Are you already active in the PV / RE business?



90 percent of the surveyed companies are active in RE business

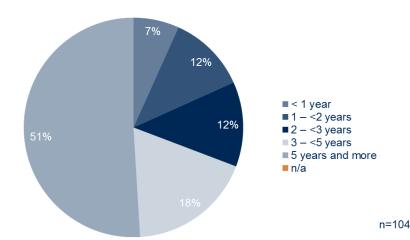
Interviewed companies

High grade of market experience



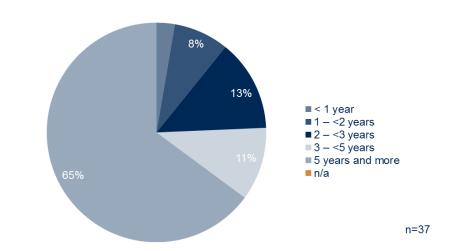
All interviewed companies

How many years of experience do you have in the RE sector?



AREU members

How many years of experience do you have in the RE sector?

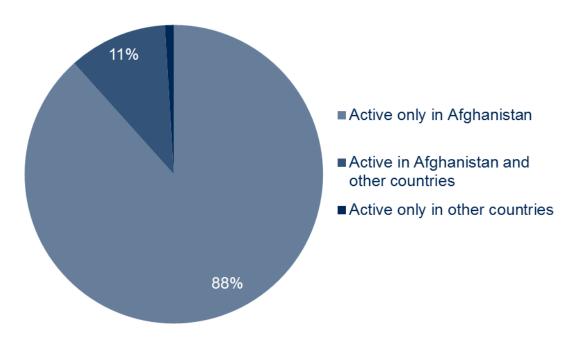


- There is a high grade of market experience
- 53 companies (more than half; 51%) are active in the RE sector for more than 5 years
- 65 percent of AREU member are active in the RE sector for more than 5 years

Region of Activity/Business



Do you have business in Afghanistan only or do you/ mother company work in other countries?



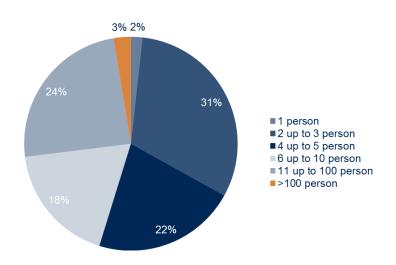
Surveyed companies are mainly active in Afghanistan (88 %)



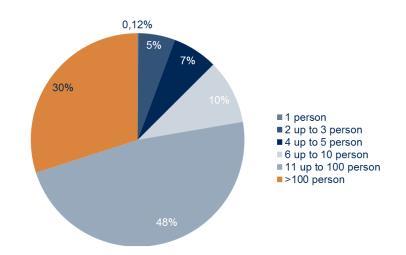
Employability

Surveyed companies employ about 1,700 person

Number of employees (companies):



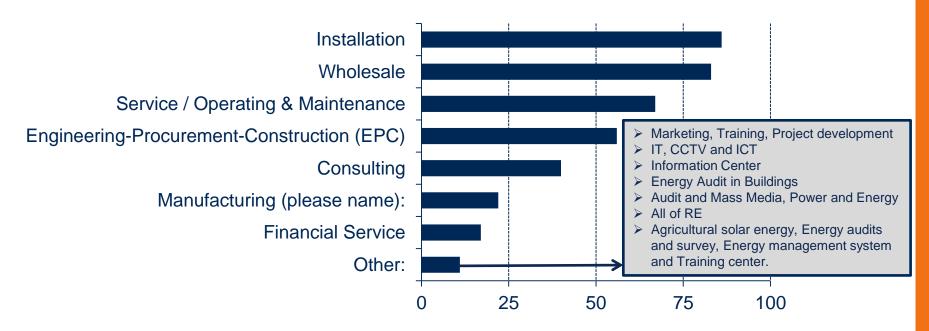
Number of employees (total):



Interviewed CompaniesFields of Business



Which products or services does your company provide? [multiple answers]

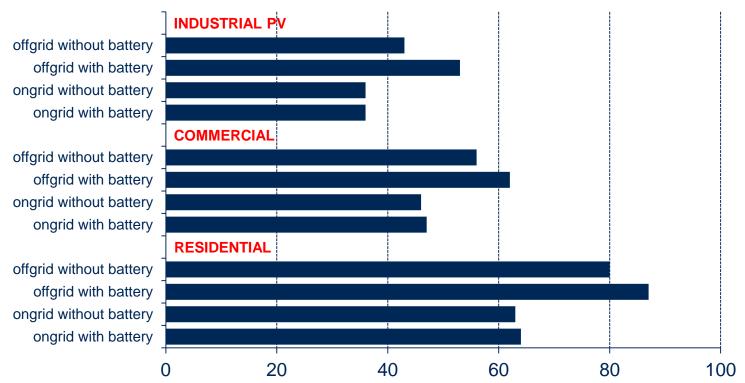


- Installation and wholesale is the main field of activity of the companies.
- 67 Companies provide "Installation" and "Wholesale"

The Companies who Offer PV Solutions



Which PV sector are you doing business in? [multiple answers] – Part 1

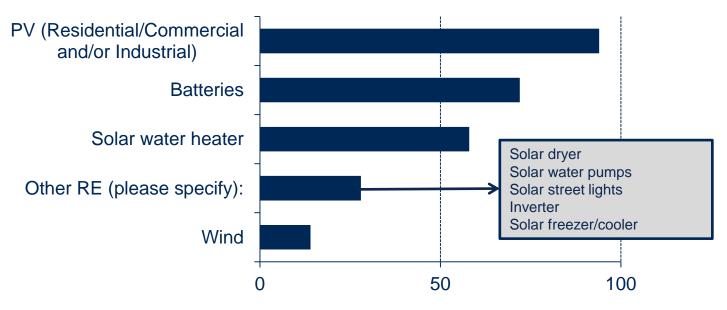


• 81 percent of interviewed companies offer PV systems in the different fields of use

Solar PV RE Source Number 1



Which sector are you doing business in? [multiple answers]- Part 2



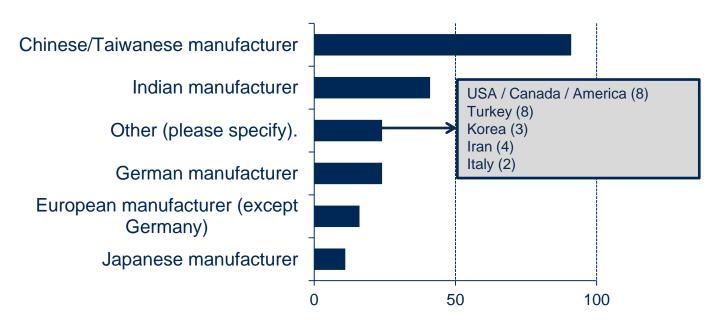
- The main RE source is Solar (PV/ Water Heater / Water Pumps / Street Lights etc.)
- 72 companies provide batteries; all of them sell PV systems
- Only 15 interviewed companies don't offer solar systems; but 12 of them plan to be active in PV business soon

Offered PV Products By Region



- Asian manufacturers dominate the market

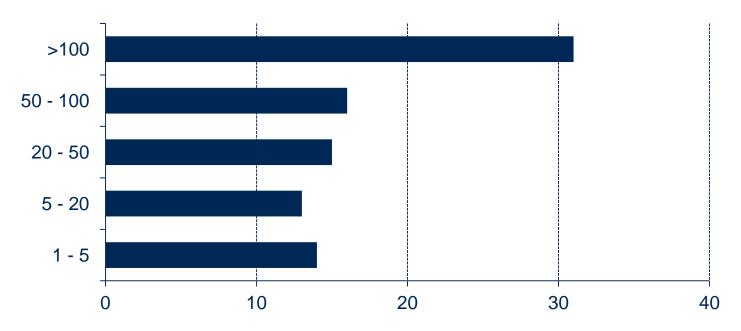
Who manufacture/produce these products (specify regions)? [multiple answers]



Implemented Project Scales



How many renewable energy systems have you installed so far approx.?

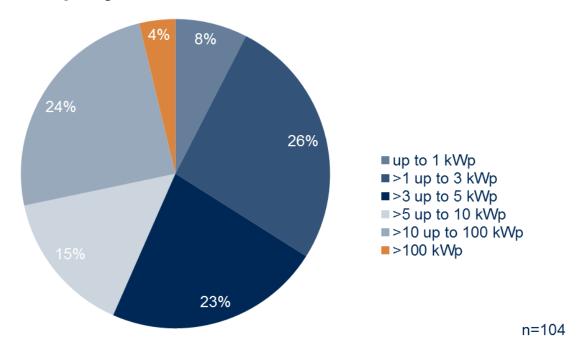


31 companies have implemented more than 100 projects; 22 of them are active in RE business for more than 5 years.

Typical Size of Solar Systems Sold/Installed by Interviewed Companies



What is the typical size (kW) of a PV system your company sells/ installs?



 The median size of sold PV systems in Afghanistan is about 5 kWp; the average is round about 30 kWp (without extrem values: around 15 kWp)

Interviewed Companies Named More Than 200 RE Projects in Afghanistan

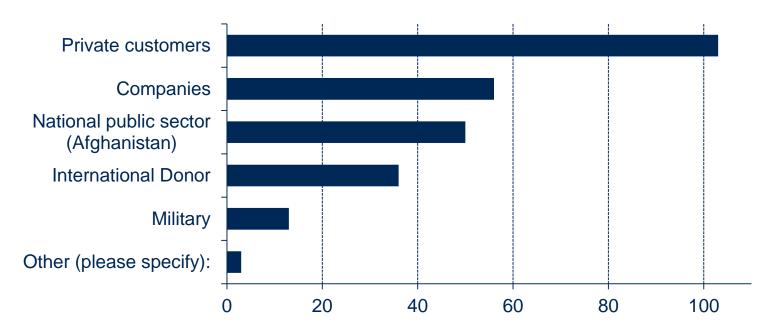


- RE projects between 0,25 kWp and large commercial Systems named
- Solar / PV is the main focus regarding RE projects:
 - 187 Solar/PV projects named
 - > PV systems on/off.grid
 - > Around 50 projects combined with "water pumps"
 - > street lights
 - ➤ Agriculture / Irrigation
 - ➤ In many cases combined with batteries
 - 16 solar water heater
 - 7 micro hydro power
 - other projects like LED lights, batteries and grid, solar dryer, solar pole, wind turbine pole (1)

Almost all Companies Surveyed have Private Customers



Who are your customers? [multiple answers]



- Private clients (most cases agriculture) are the most important customer group followed by companies
- National public sector as well as international donors are important principals

Requested Fields of Support All companies surveyed



What kind of support in which fields would you need or do you need to facilitate your business (Please prioritize):

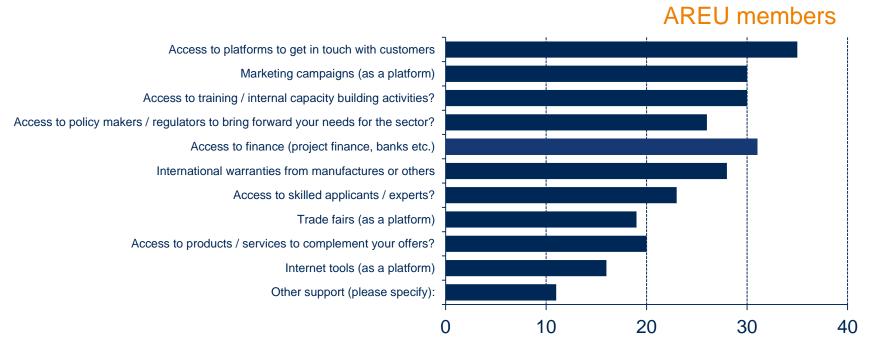


- Companies operating in Afghanistan are looking for support in acquiring new customers
- Especially platforms to get in touch with customers are required
- Marketing campaigns are also seen as a useful tool to facilitate business
- Staff training and internal capacity building are also requested fields of support

Requested Fields of Support AREU members



What kind of support in which fields would you need or do you need to facilitate your business (Please prioritize):



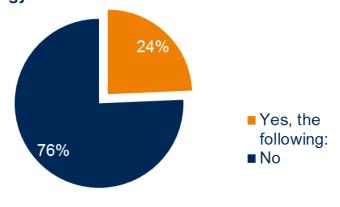
- AREU member need in the most cases platforms to get in touch with customers
- The second most important field of support is access to finance
- Marketing campaigns and staff training is also relevant for AREU members
- International warranties from manufacturers are important for RE business

Recent government policies / laws / plans for Renewable Energy - described by interviewees



All interviewed companies

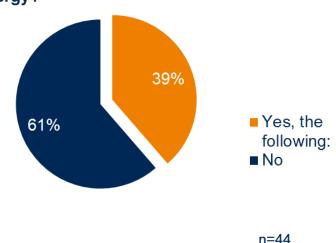
Are you aware of government policies / laws / plans for Renewable Energy?



n=111

AREU members

Are you aware of government policies / laws / plans for Renewable Energy?



- AREU members are better informed than the RE sector
- BUT nevertheless three-fifths are not informed regarding the governments policies / laws or plans for Renewable Energy

Recent government policies / laws / plans for Renewable Energy AREU Members



- The government beside hydro power have plan to be active in RE too.
- The regulatory authority develops the tariffs structure and determines the tariff for Distributed Generations)
- the Afghan Government launched the package of 2000MWp RE projects which are open to private investments
- Electricity law and RE policies.
- the Afghanistan Power Service Regulation Act has been legislated
- Renewable Energy Policy has been approved by the Cabinet
- Renewable Energy Strategy has been approved by the MEW
- Energy Efficiency Code for Buildings has been approved by the High Council
- Energy Regulatory Authority Law has been developed
- Regulation for Grant of Licensing has been developed
- Regulation for Net-Metering has been developed
- Regulation for Determination of Tariffs has been developed
- Five Years Energy Sector Transition Plan has been approved by MEW
- Roadmap for the Five Years Energy Sector Transition Plan has been approved
- Energy Security Plans Outline has been developed
- National Energy Policy has been developed, Energy Sector Master Plan has been approved
- ▶ PPP & PPA

Recent government policies / laws / plans for Renewable Energy Non-Member



- The MEW plans to install 500MWp Solar PV until 2022 among which 300MWp will be connected to the grid
- The Afghan Government launched the package of 2000MWp RE projects which are open to private investments).
- The Afghan Government intends to strengthen the Privet Sector to invest in RE projects by means of PPP and PPA)
- Electricity law and RE policies.
- the Afghanistan Power Service Regulation Act has been legislated
- Renewable Energy Policy has been approved by the Cabinet
- Renewable Energy Strategy has been approved by the MEW
- Energy Efficiency Code for Buildings has been approved by the High Council
- Energy Regulatory Authority Law has been developed



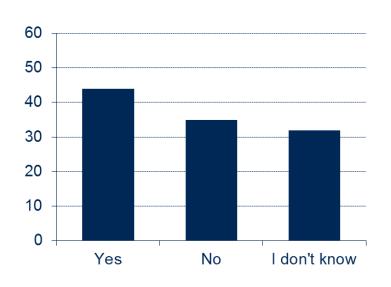
Questions about

- AREU membership
 - AREU services
 - Etc.

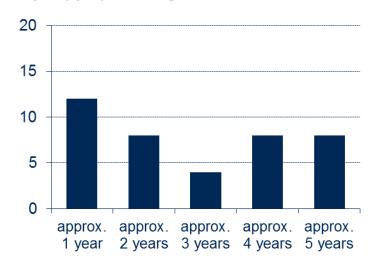


44 AREU Members Interviewed

Are you member of AREU?



How long have you been a member of AREU?



- 44 AREU members interviewed
- 35 companies are not a member of AREU
- 31 further non-member never heard of AREU before

BSW

Why did you choose to be member of AREU?

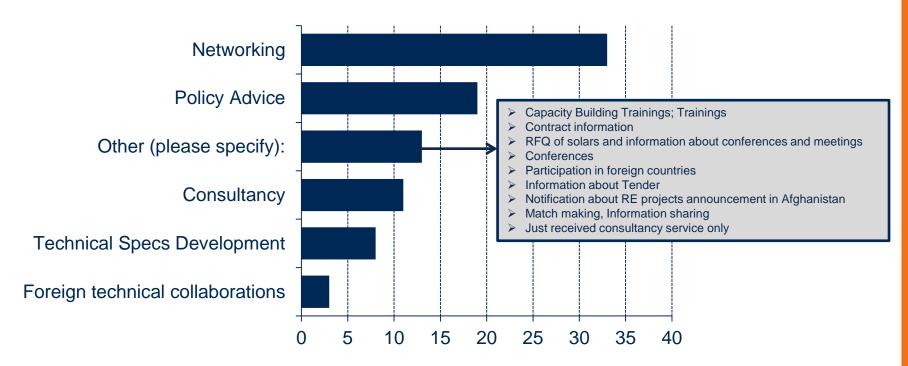
Number of nominations

Networking (with companies, government and other)	_22
Information / opportunities	_18
Improve business	_14
Access to / information about projects	_11
Awareness of RE	_8
Collaboration with companies / government / donors / other_	_8
Solve companies problems by AREU	_8
Training	_6
Increase trust in companies / RE sector	_5
Find customers	_4
Looking for support	_3
Receive services / support	_2

Most important AREU services Networking and Policy Advice



What kind of services are you receiving from AREU at the moment? [multiple answers]

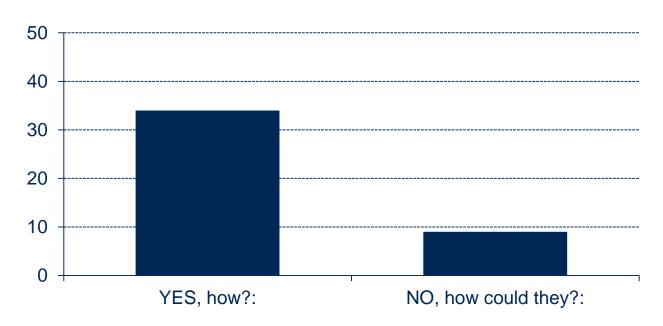


Currently networking is the most relevant service for AREU members

The majority of the members feel represented by AREU



Do you think that AREU is helping you doing business in Afghanistan? Do you feel AREU is representing your company's interests?



Most AREU members believe that AREU is representing companies interests

Do you think that AREU is helping you doing business in Afghanistan? Do you feel AREU is representing your company's interests?



→ YES, how?:

	Number of nominations		
Awarness / information about projects	11		
Exhibitions/conferences/RE events/			
workshops/travels	8		
Capacity building programs / staff training	7		
Information about RE sector	7		
Networking			
company - company	6		
company - donor	4		
company - government	5		
Increasing trust in companies / in RE	5		
Certification/quality standards	4		
➢ Solve problems			
in the RE sector / from member / with government	4		
Provide bidding information / access to projects	4		
Business development	2		
Policy advice / lobbying	2		

Do you think that AREU is helping you doing business in Afghanistan? Do you feel AREU is representing your company's interests?



→ NO, how could they?:

- Technical training programs for engineers / capacity building programs
- Coordination of large projects between companies.
- Introduce companies to government, donors, companies and customers.
- Create show room / Establishment of exhibitions
- Invite my company in governmental meetings and exhibitions
- Quality of RE sector products in Afghanistan / Help us in receiving the ISO certificate / Check the qualities according to standards
- Standardize the products quality and control the projects quality
- Pave the ground for getting the land in industrial parks.
- we want from AREU to grantee from our company standard and quality until we can get access to projects.
- Awareness the companies from projects in time.
- Help us in solving of tariff problems
- Distinguish the valid and trustfully companies with invalid and untruthfully companies

Which aspects need to be improved / optimized in AREU's structure as well as member services?



Professional an "strong" administrative staff	10
> avoiding self benefit in leadership of AREU	6
Chairman/Chief have to be professional in RE (also technical)	5
➤ Better/more training / capacity building	4
➤ More networking (member / with donor and government)	4
More transparency	4
> Active advisor necessary	2
Standardization / quality standards	2
> (creating) Business development	2
> Regular (weekly) meetings	2
➤ Impartial chairman	1
Vice president have to be a woman	1
➤ Board member have to be professional in RE	1
➤ Workshops	1
➤ Include all member in adjusting AREUs position	1
Create platforms to get in touch with customers	1
> AREU have to be more active	1
More local content	1
Implementation of a member service	1
➤ More coordination between member companies	1
> Support in getting projects	1
> Improved website (responsive)	1
➤ More budget	1



Organization

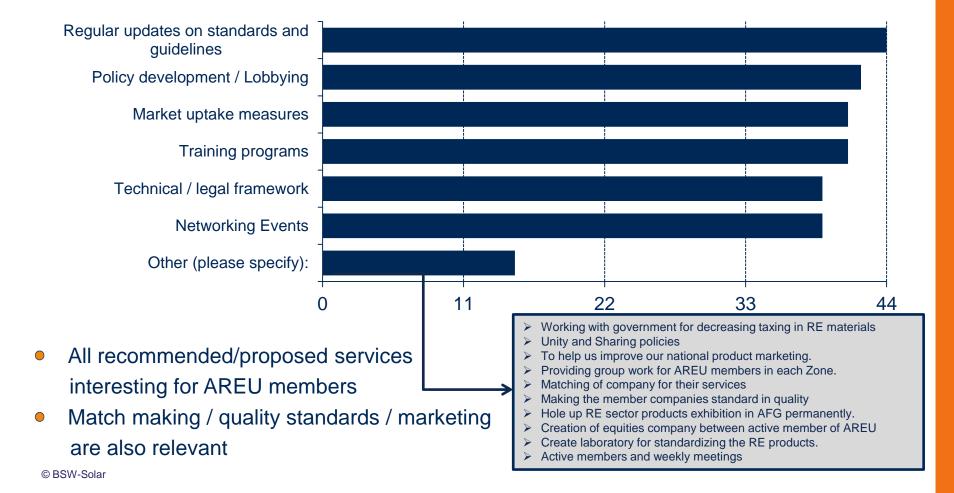
Market development

Policy Advice

Expected services in the future



What services are you expecting to have from AREU in the future? What kind of services is most relevant within your membership with AREU? [multiple answers]



Agenda



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BSW SOLAR

Agenda

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Core functions of Associations



Internal structure of Association

- As capable service provider and efficient (decision / actions) body for members!
- Transparent and cost efficient!
- Fast information provider for its adherents!

Political Lobbying / Campaigns

- Representation large parts of the industry with one voice!
- Mobilizer of relevant actors!
- Competent partner for political decision makers!

Market development and communication activities

- Bundling of actors to provide accurate information to diverse target groups!
- Capable actor to collect market information and draw conclusions to direct market growth!
- Service provider to potential target groups / clients!

German Solar Association (BSW-Solar) Peer-to-Peer cooperation



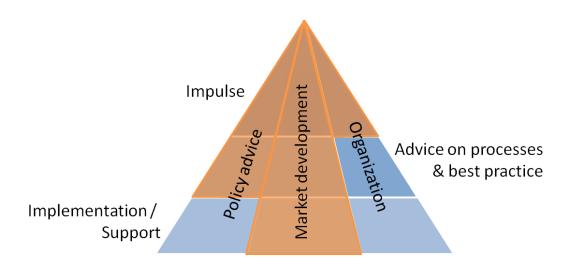
Impulse: Situation identification, exploration and evaluation of

strategic options for action

Advice: Process analysis, implementation, process facilitation

Implementation: Implementation of specific (cooperative) projects and

support of projects



BSW-Solar's areas of expertise within the framework of association partnerships (red)

Agenda



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44

AREU: Strengthening the Association Vision and Mission statement – According to the website http://www.areu.com.af/en/overview/



Purpose of AREU

- Products + Services: RE standardization, organize and regulate the RE products and services
- Guidance: Assists + guides international investors and stakeholders
 - in the appropriate investments
 - national RE trade policies and procedures.
- Lobbying: Exert a decisive influence on creating and securing a suitable policy framework for stable growth, and thus on ensuring investment security

Objectives and Structures

- Establish RE energy as a permanent pillar of a national energy industry.
- AREU is comprised of an elected Board of Directors, which sets strategic guidelines and a frame for the work of the AREU Office
- Several working groups in which AREU members can actively participate to shape the work of AREU.
- AREU is **not-for-profit and non-political legal organization**, operating under an independent financial and administrative system. It serves the relevant stakeholders in getting maximum from the available natural RE sources and help consumers to receive the possible at highest level possible.

Work groups for the workshop! What can the association achieve?



Internal development work group!

- Focus on Services, Funding, Decision structures, Technical bodies, Acquisition strategies
- Structures and actions to achieve those + Prioritization!

Political Lobbying / Campaigns work group!

- Bundling of interests, how to get in touch with key stakeholders, exert pressure, formats, goals and activities
- Market development and communication activities, and how to finance those + Prioritization
- Market development and communication activities work group
 - Market segment with maximum benefit for members, dissemination in short, mid and long term key activities.

© BSW-Solar Instruments and measures + Priorization

Steps in setting up those goals / services Priorization + Operationalisation!



Prioritization of the most important needs / services under the considerations:

- 1. Membership benefit and potential for membership acquisition
- 2. Technical complexity
- 3. Costs and revenue generation
- 4. Staff intensity

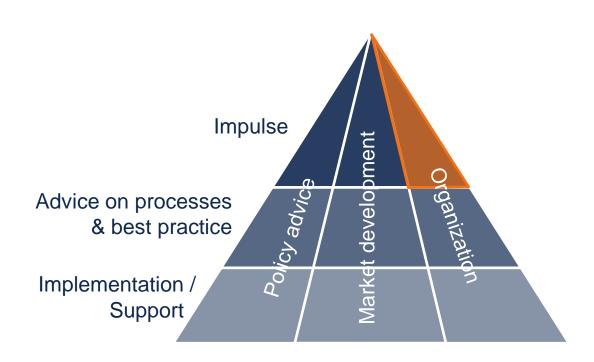
Development of Business plan for non-sufficiently financed structures & new priorities

- 1. Staff required for achieving those goals
- 2. Budget required for those goals
- Sources of income (e.g. membership fees, income from pay-for services, events / trainings, marketing, sponsoring etc.)
- 4. Timeframe to realize those goals



Support possibilities by the BSW-Solar

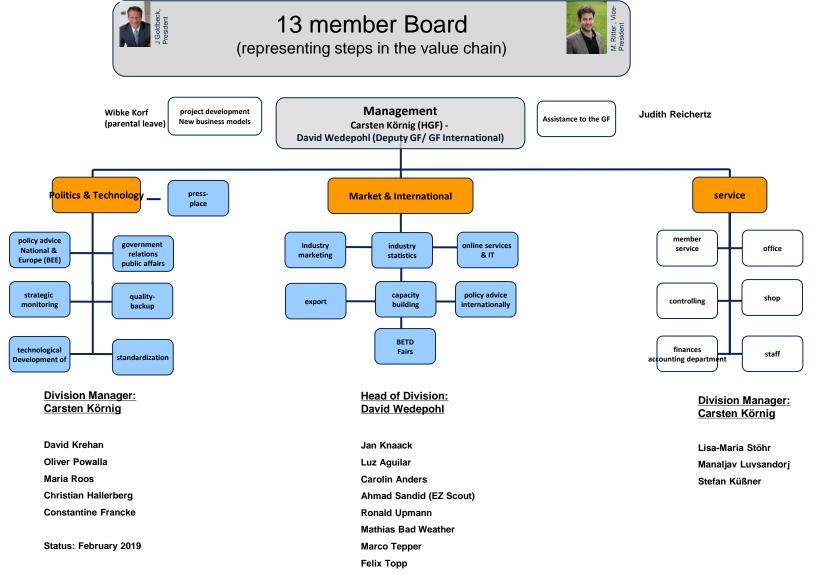
Impulse: Determination of the situation, exploration and evaluation of strategic options for action



The service fields of BSW-Solar within the framework of association cooperations © BSW-Streed)

...Structures & Services Example of BSW-Solar







Examples: Funding + Services of BSW-Solar

Funding

- Membership Fees
- Products and services
- Events, Trainings
- Projects for various stakeholders / donors
- Special activities
 - Campaigns
 - Publications
 - Studies

Services

- Lobbying + Interest gathering
- Networking platform + technical work + business opportunities
- External information provision
 - Press releases, graphs and charts
- Trade fair participation / spec. conditions
- Information
 - Weekly Newsletters information
 + tenders information
 - Statistics, Price monitoring, business climate index
- Help desk:
 - Technical and legal services

Examples: Information services & exchange for members



Information provision for members

- Up-to date market information and statistics on markets & industry
- Workshops & conference organization and member discounts
- Studies on technical and economic matters
- Translations of important legal documents

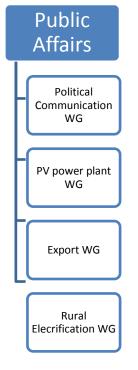
Working groups for members

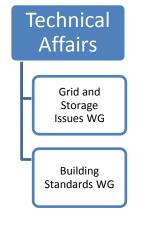
 Export promotion, norms & standards, grid connection, communication

Special legal consulting

services at favourable conditions

Photovoltaic Working Groups







Weekly newsletter "BSW intern"





companies







Intersolar:

Exhibition stand at proven position (with BMZ) in hall B2 directly at the most important running track of the visitors.

Off-Grid-Power Forum in Hall B3

Country events on Mexico, Algeria, Pakistan and much more.

ees Europe:

Comprehensive public relations work and materials on storage topics

Own press communication

Power2Drive:

Workshop on electromobility and charging technology



EM power:

Workshop on overarching topics of energy system transformation such as blockchain and digitization

Workshop on the EU project PVP4Grid



Example: Installer trainings, conferences and Smarter E-partnership with exhibition and webinars



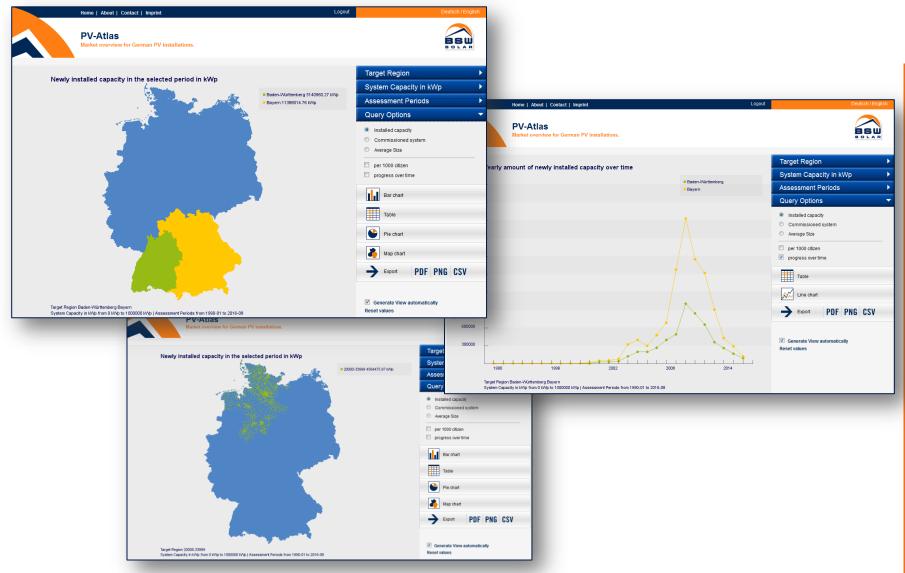






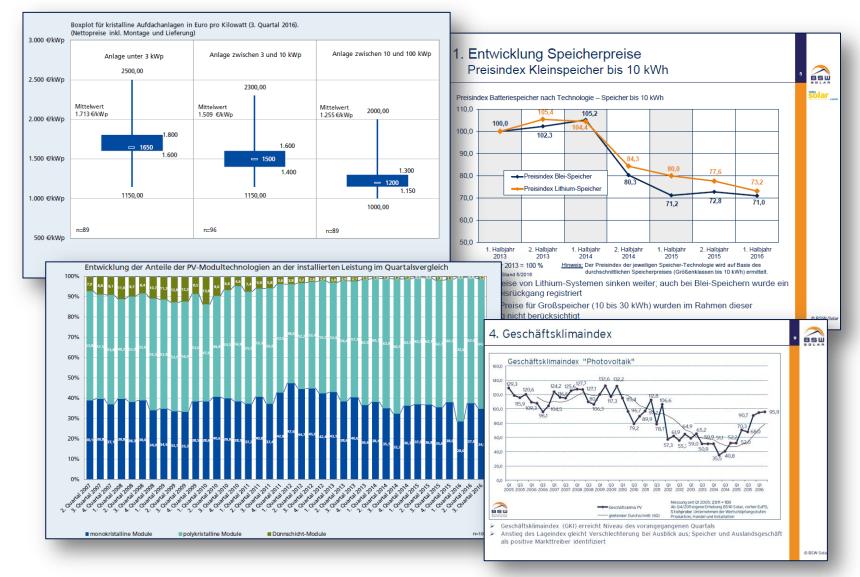
Examples: Online market overview exclusively for Members: PV Map Germany "PV Atlas"





Example: System Price Index (PV/Storage) and Business Climate Indexes





Guiding questions for Work Group on Internal Development of AREU



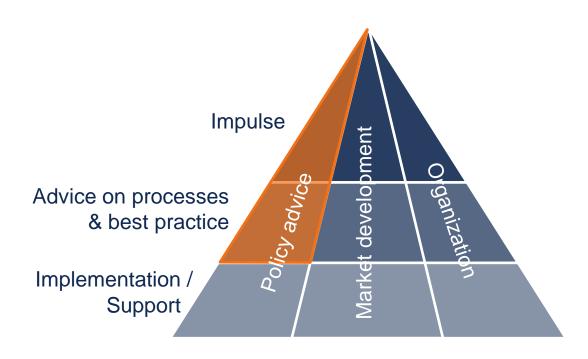
- How are key demands by members fullfilled (networking, information opportunities, improve business framework, information on projects, awareness raising, bring together stakeholders, solve problems for AREU-members)?
- How can existing structures be improved to fullfil demands?
 Will it comply with association regulations?
- Which new services or structures are missing to fullfil these demands?



Policy advice

Impulse: Determination of the situation, exploration and evaluation of strategic options for action

Consulting: Process analysis, implementations, moderation of processes



The service fields of BSW-Solar within the framework of association cooperations © BSW-Solar within the framework of association cooperations



Examples BSW-Solar for Lobbying

Positioning through

- Work groups → creating a working group for lobbying activities
- (Legal) Studies to special topic (techn. / economic) targeting at policy makers / media

Direct lobbying

- Parliamentary breakfast to present positions to MP's / their employees
- Bilateral meetings with (employees of) MP's / ministries of association board members / staff
- Support / appeal individual lobby activities by member companies in constituencies focused at their MP's

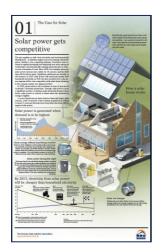
Indirect lobbying

- Manifestations of the industry representatives
- Enquiries / Media work
- Presentation in technical committees (e.g. in electro-technical standards / buildings standards etc)

BSW

Examples BSW-Solar

- Study: BSW-Solar Roadmap 2020 (in 2010)
 - Provision of outlook on the macro-economic benefits and energy policy as base for discussion to communicate with policy makers
- Basic to communication to the public
 - Agenda setting
 - Media monitoring
 - Information provision on special topic







Guiding questions for Work Group(s) on Policy Advice



- Which (technical) Comittees exist in AREU capable of making detailed proposals? How is the work / decision process organised?
- Are the relevant stakeholders known (databases etc.) and do access points (events / forums) exist?
- Which formats that are accepted by politicians / decision makers in Afghanistan?

Support possibilities by the BSW-Solar: Market development

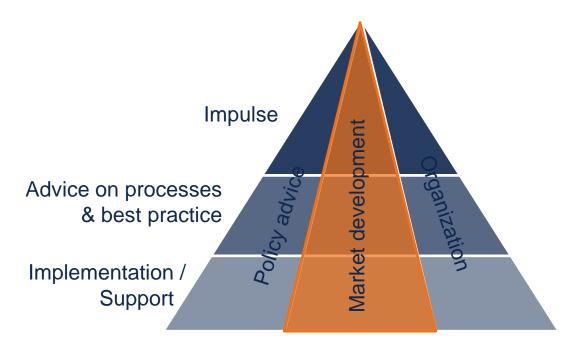


Impulse: Determination of the situation, exploration and evaluation of strategic options for action

Consulting: Process analysis, implementations, moderation of processes

Implementation: Implementation of specific (cooperation) projects and support for

projects



The service fields of BSW-Solar within the framework of association cooperations © BSW-Streed)



Examples / Proposals by BSW-Solar

- Week of the Sun (Germany wide participatory campaign of companies / (consumer) organizations / European Solar Week
- Social Media campaign for Solar Energy Label with support of postcards / films / price game
- Marketing campaign concept for Pakistan (planned for late 2019 based on Week of Sun)
- Tender newsletter for companies doing business

Public Campaign: Week of the Sun

 2007 to 2017 – the largest B2C solar information campaign of the world





Aim

- Raise awareness for solar energy in Germany
- Inform people about the use of solar energy
- catch attention with a variety of events in one week

Means

- supporting and activating local players
- involving key multipliers (regionally and nationally)

- 5.700 events during 10 days
- All over Germany
- 500.000 visitors
- 1.200 active event partners (mainly installers)
- 2015 figures







Variety of events: e-bike tours, solar party, information day, open house, ...











Week of the Sun: Support provided by BSW-Solar and 100s involved actors



- Week of the Sun Website with basic information + indication on events with geographical search function
- Week of the sun newspaper 250.000 copies
- Week of the sun exposition / gadgets in online shop (caps, pens, etc.
- Media communication + start event / press release
- Acquisition of network partners / sponsors
- Information of industry
- Special interest websites / subsites
- Helpdesk
-

BSW-Solar provides multiple online portals that offer presence for members!



Essential BSW offers:

- www.solartechnikberater.de
- www.die-sonne-speichern.de
- www.waermespeichern.de
- www.woche-der-sonne.de
- www.solaratlas.de
- www.pv-atlas.de
- www.bsw-solar-shop.de
- www.solar-business.com
- www.sonne-teilen.de NEW!



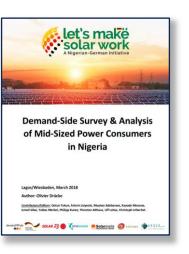
Interested in BSW advertising formats on the BSW online services? upmann@bsw-solar.de, Tel. 030 29 777 88 -31

BSW SOLAR

Examples of BSW-Solar

Awareness raising campaign "Let's make solar work" – Nigeria

- Including
 - Calculation tool for investors
 - Enabling study
 - Quality trainings









Drücke adopts Germany's 'the whole is bigger than the sum of its parts' ethos to encourage collaborat



Questions for Work Groups on Market Development

- Which user groups are attractive / accessible to AREU / industry associations? Which segmentation exists?
- Which formats are appropriate / acceptable in Afghanistan for different target groups? How much effort is involved?
- Which other actors have to be involved with flanking measures (e.g. involvement of financial / technical institutions)?

BSW SOLAR

Please choose a work group to participate!

Internal development work group!
Names:

Political Lobbying / Campaigns work group!

Names:

Market development and communication activities work
 group

Names:

Guiding questions for Work Group on Internal Development of AREU



- How are key demands by members fullfilled (networking, information opportunities, improve business framework, information on projects, awareness raising, bring together stakeholders, solve problems for AREU-members)?
- How can existing structures be improved to fullfil demands?
 Will it comply with association regulations?
- Which new services or structures are missing to fullfil these demands?

Guiding questions for Work Group(s) on Policy Advice



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Reminder: Steps in setting up those goals / services Priorization + Operationalisation!



- Prioritization of the most important needs / services under the considerations:
 - 1. Membership benefit and potential for membership acquisition
 - 2. Technical complexity
 - 3. Costs and revenue generation
 - 4. Staff intensity
- Development of Business plan for non-sufficiently financed structures & new priorities
 - 1. Staff required for achieving those goals
 - 2. Budget required for those goals
 - Sources of income (e.g. membership fees, income from pay-for services, events / trainings, marketing, sponsoring etc.)
 - 4. Timeframe to realize those goals

