

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



Solarenergieförderverein Bayern e.V.

Office
Friedrich-List-Str. 88
81377 München

T 0 89 / 27 81 34 - 28
F 0 89 / 27 81 34 - 30

info@sev-bayern.de
www.sev-bayern.de

Architectural Award Building Integrated Solar Technology²⁰¹⁷

About the competition

With its Building Integrated Solar Technology Architecture Award, the Bavarian Association for the Promotion of Solar Energy (SeV) honours outstanding contributions to the planning and design of building-integrated solar systems and raises public awareness about exemplary solutions with high-quality architecture.

The number of participants and the quality of the projects entering the competition, which has been held for the seventh time since 2000, are testimony to the continuing topicality of the theme.

134 projects from 26 countries were initially registered for the 2017 Architecture Award. 119 projects were presented to the jury that actually entered the competition and fulfilled the competition criteria. A closer examination of the entries reveals that only a third (≈ 34 per cent) come from Germany. Owing to the high proportion of entries from Switzerland and Austria, the German-speaking region (D-A-CH) nevertheless makes up roughly 77 per cent. However, a gratifying aspect is the growing number of participants from non-German-speaking countries, especially from Scandinavia and the Benelux countries, which shows that the competition continues to gain international recognition.

Of the 119 approved projects, two entries were evaluated in the „Student Work Award“ category. No student prize was awarded after reviewing and discussing these schemes.

A total of 117 schemes were evaluated in the „2017 Architectural Award for Building-integrated Solar Technology“ competition. Within these projects, housing construction continues to account for the largest share with 43 per cent, whereby a good 60 per cent were for detached and semi-detached homes. However, there continues to be a clear increase in projects in the non-residential sector.

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



The other building types mainly comprise office (21 per cent), educational (9 per cent), event (8 per cent) and industrial/commercial buildings (6 per cent). The vast majority of entries are new-build schemes, even if the renovation examples show that it is also possible to successfully integrate solar technology into existing roofs and facades. In addition, the entries confirm the continued focus on photovoltaic systems. There are a number of combined solutions in the (small-scale) residential construction field, while pure solar-thermal roof and/or facade systems are the exception.

In the first round the jury members individually scrutinised all the schemes before discussing them together.

The remaining 71 projects were assessed in greater detail in the second round in terms of the objectives of the competition, with the overarching evaluation criteria particularly based on architectural aspects such as the holistic conception and the degree of innovation (energy and construction). The schemes as a whole showed an impressive level of quality in terms of both the architecture and building technology. In particular, specific structural and creative features that go beyond the previously achieved „standards“ were discussed in detail, including during the following third round (41 remaining projects) and fourth round (25 remaining projects).

From the schemes that reached the fourth round the jury selected 15 projects for the „shortlist“: Scheme 011, Scheme 014, Scheme 023, Scheme 027, Scheme 059, Scheme 062, Scheme 067, Scheme 068, Scheme 080, Scheme 083, Scheme 084, Scheme 091, Scheme 103, Scheme 107 and Scheme 112 (see p.13 ff. Schemes submitted according to project number).

Following a detailed assessment of the innovation potential and exemplary character of the solutions for the respective construction tasks, these schemes were narrowed down for the main prize (Scheme 011, Scheme 014, Scheme 027, Scheme 067, Scheme 080, Scheme 084, Scheme 091, Scheme 103). The jury considers these projects to be outstanding responses to the core subject of the competition.

Following further assessment of the projects and a detailed discussion, the schemes were ranked as follows:

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



Foto: Brigida González

Architectural Award Building Integrated Solar Technology²⁰¹⁷ (15,000 EUR)

Scheme 067: Weikersheim-Schäftersheim (D), Hof 8 (2014)
Applicant: Architekturbüro Klärle, Bad Mergentheim

The construction of buildings in rural areas is characterised by numerous challenges. Here the energy efficient renovation of existing buildings using renewable materials is just as relevant as the use of renewable energies for decentralised heat and power generation.

With its holistic approach, the „Hof 8“ scheme makes an extraordinary contribution to this complex task field, which also needs to take into account aspects relating to inner-community development and demographic change. In addition to a coherent mix of uses, the use of regional products and the reuse of materials, the photovoltaic system (80 kW) is fully integrated across the entire roof surfaces of the various buildings that make up the former farm ensemble. Although the on-roof installation chosen is somewhat conventional in structural terms, the 550 m² solar power system impresses with its carefully detailed treatment of the roof edges.

The partial surfaces created by the junctions between different roofscapes are harmoniously resolved with colour-matched panels. The combination with existing rubble stone walls and new timber facades also illustrates the design potential offered by standard solar technology.

„Hof 8“ is a self-assured refurbishment scheme in which a groundwater heat pump, battery storage unit and electromobility form intrinsic components of the energy-plus building ensemble's integral energy concept, which also incorporates the neighbours in the medium to long term. The scheme provides valuable impetus for sustainable rural development and shows that photovoltaics can be an entirely self-evident construction material in building renovation.



Foto: Brigida González



Foto: Brigida González



ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



Photo: Constantin Meyer

Special Recognition Award Building Integrated Solar Technology²⁰¹⁷ (5,000 EUR)

Scheme 027: Frankfurt/Main (D), Aktiv-Stadthaus (2015)
Applicants: EGS-plan, Stuttgart; HHS Planer + Architekten, Kassel

Energy-plus buildings in densely populated, inner-city environments have been scarce until now. An outstanding project that could act as a trailblazer in this context is the Aktiv-Stadthaus in Frankfurt am Main. On a confined urban site the architect has succeeded in delivering an 8-storey apartment building with 74 residential units to the Efficient House Plus standard on a 160-metre-long and only 9-metre-wide plot.

As part of the ambitious energy concept, photovoltaic systems in the roof (251 kW) and facade (118 kW) are combined with electricity storage (250 kWh), heat pumps and buffer storage tanks along with an innovative energy management system to produce surplus energy in the annual energy balance.

Along the elongated, gently undulating southern elevation, monocrystalline anthracite modules, mounted upright with visible fastenings, alternate with the openings and form an effective contrast to the white bands of Eternit panels and the vertical timber cladding.



Photo: Constantin Meyer



Photo: Constantin Meyer



Photo: Constantin Meyer



Photo: Thomas Baron

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



Special Recognition Award Building Integrated Solar Technology²⁰¹⁷ (5,000 EUR)

Scheme 080: Nordhavn (DK), Copenhagen International School (2017)
Applicants: Ejendomsfonden Copenhagen International School
C. F. Møller Architects, København

The new school building, prominently located on the waterfront in the Nordhavn docklands area, is characterised by the very differentiated structure of the building form, which is reminiscent of stacked ship containers. Projecting and recessed blocks, whose almost square glass panels create a lively elevational treatment in light blue to turquoise green shades, extend above a partially glazed podium zone.

The technically and creatively innovative approach: The specially coated cover glass for the monocrystalline modules enables the photovoltaics to retreat into the background and creates novel, tinted solar facades in which vapour-deposited oxide layers reflect only a specific spectral range of sunlight. In order to articulate the 6,000 m² of surface area, the 12,000 modules in metal frames are mounted at different angles so that the facades – depending on the solar radiation and angle of view – change their hue although the modules all have the same colour.



Photos: Adam Mørk

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



Photo: Ralph Feiner

Special Recognition Award Building Integrated Solar Technology²⁰¹⁷ (not endowed)

Scheme 011: Tamins (CH), Wohnhaus Schneller Bader (2016)
Applicant: Bearth & Deplazes Architekten, Chur

The photovoltaic roof of the house in Tamins provides an exemplary solution for detached and semi-detached family homes. The elongated and narrow building features a clear design vocabulary with a restrained palette of materials. The south-facing roof surface (108 m²) is entirely covered with monocrystalline PV modules (17.28 kW) on a timber substructure that is visually expressed along the eaves and projecting verges. The solar technology also harmonises with the slightly lower roof surface covered in corrugated sheet panelling, as well as with the exposed concrete surfaces and the wooden sliding shutters.



Photo: Ralph Feiner



Photo: Andreas Graber

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



Photo: Marcello Girardelli



Photo: Marcello Girardelli

Special Recognition Award Building Integrated Solar Technology²⁰¹⁷ (not endowed)

Scheme 014: Tschagguns (AT), Stall B. (2015)

Applicant: Bernhard Breuer – Produktentwicklung, Architektur, Städtebau, Schruns

The refurbishment and conversion of a former farm building into a private house features an entirely southeast-facing solar roof on which solar thermal (20 m²) and PV modules (55 m²) are arranged in clearly differentiated sections with slightly overlapping, equally sized component dimensions. The solar roof provides about 200 % of the electricity and most of the heat requirement. The project shows the design possibilities offered by solar technology, including on existing buildings, and visibly expands Vorarlberg's timber building tradition with a sustainable energy concept.

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



Photo: Eibe Sönnecken

Special Recognition Award Building Integrated Solar Technology²⁰¹⁷ (not endowed)

Scheme 084: Neu-Ulm (D), Effizienzhaus Plus im Altbau (1938/2015)
Applicant: o5 Architekten BDA, Frankfurt/Main

In Neu-Ulm, drab-looking 1930s terraced housing has been successfully transformed into attractive energy-plus homes. Although the construction costs were dictated by the subsidy requirements for social housing in Bavaria, the new elevations with their timber extensions and projecting elements reflect both ecological and aesthetic values. With the exception of a few flush-mounted skylights, the south-facing roof (205 m²) is entirely covered with 152 PV modules (31.16 kW). This is a self-evident solution, which also impresses in terms of the construction through the carefully detailed work.



Photo: Eibe Sönnecken



Photo: Eibe Sönnecken

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



Special Recognition Award Building Integrated Solar Technology²⁰¹⁷ (not endowed)

Scheme 091: Basel (CH), Grosspeter Tower (2017)

**Applicants: Planeco, Münchenstein; Burckhardt+Partner – Architekten,
Generalplaner, Basel**

The surrounding facade of the office tower is characterised by a clear grid structure with window openings that become wider with increasing height. The opaque facade surfaces (5,000 m²) consist of CIGS thin-film solar modules (glass - CIGS cell - glass, 440 kW) from the Manz company. Two to three solar sub-modules are applied to a rear panel consisting of expanded glass granules in order to achieve the necessary stability. The different dimensions and architectural requirements have necessitated the need for around 450 different types of facade elements, which are attached to the substructure by means of rear-mounted support channels. This creates a homogeneous surface effect that, combined with the use of string optimisers, provides an elegant and high-performing alternative to natural stone and metal facades.



ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



Special Recognition Award Building Integrated Solar Technology²⁰¹⁷ (not endowed)

Scheme 103: Leipzig (D), Katholische Propsteikirche St. Trinitatis (2015)
Applicant: Schulz und Schulz Architekten, Leipzig

The new church building is based on an ambitious sustainability concept that ranges from the choice of durable regional materials to the visible solar power system. On the narrow southern facade of the church tower, a dark band (140 m²) of CIGS thin-film modules (15.6 kW) is integrated precisely and flush above the first floor. The transversely arranged, frameless PV panels with a 2:1 aspect ratio sit well proportioned within the internal surface and form an effective contrast to the stepped facade cladding made of reddish-violet Rochlitz porphyry. The „solar“ church tower on the edge of Leipzig’s city centre provides an important urban landmark and symbolises the church community’s support for solar energy.



Photos: Stefan Müller

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



Shortlist Building Integrated Solar Technology²⁰¹⁷



Scheme 023:
Klaus (AT),
Omicron Campus (2016)
Applicants:
Sunovation, Eisenfeld
Dietrich | Untertrifaller Architekten,
Bregenz



Scheme 068:
Hallein (AT), Kirche und Gemeinde-
zentrum Rif-Taxach (2014)
Applicant:
Architekt Walter Klasz,
St. Sigmund



Scheme 107:
Seoul (ROK),
FKI Tower (2014)
Applicant:
Adrian Smith + Gordon Gill
Architecture, Chicago



Scheme 059:
Freiburg (D),
Rathaus (2017)
Applicants:
a2-Solar, Erfurt
Ingenhoven Architects, Düsseldorf



Scheme 083:
Frankfurt/Main (D),
EnergiehausPlus Riedberg (2015)
Applicants:
Nassauische Heimstätte, Frankfurt
HHS Planer und Architekten, Kassel
EGS-plan, Stuttgart



Scheme 112:
Stühlingen (D),
Büro- und Empfangsgebäude (2016)
Applicant:
Sto, Stühlingen



Scheme 062:
Mönchengladbach (D),
NEW Blauhaus (2015)
Applicant:
kadawittfeldarchitektur, Aachen

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



Prize jury meeting

Date: 06.10.2017

Venue: Hotel Sofitel Munich Bayerpost, München

Start: 10.00 Uhr End: 18.00 Uhr

Attendees (in alphabetical order):

Prof. Dr.-Ing. Gerd **Becker**

(Member of the Board, Solarenergieförderverein Bayern e. V.)

Dr. Claudia **Hemmerle**

(Fachhochschule Salzburg)

M. Arch. UCB/dipl. Arch. ETH Beat **Kämpfen**

(Kämpfen für Architektur, Zürich)

Prof. Dr.-Ing. Roland **Krippner**

(Architekt, Technische Hochschule Nürnberg Georg Simon Ohm);
Secretary

Arch. vis.Prof. DI. Georg W. **Reinberg**, M. Arch.

(Architekturbüro Reinberg, Wien)

Dr.-Ing. Bruno **Schiebelsberger**

(Chairman of the Board, Solarenergieförderverein Bayern e. V.)

Dipl.-Ing. Jakob **Schoof**

(Editor DETAIL)

Prof. Dr.-Ing. Ulrich **Wagner**

(Technische Universität München)

Organisation

Fabian Flade M. A.

(Office manager, Solarenergieförderverein Bayern e. V.); Co-Secretary

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



Submissions (according to project number)

- | | |
|--|--|
| 001 Parndorf (AT), Bürogebäude Püspök
ad2 architekten, Weiden/See (AT) | 029 Hirschaid (D), Energiepark
Energiepark Hirschaid (D) |
| 002 München (D), Wertstoffhof Plus Mühlangerstraße
Adam Architekten, München (D) | 030 München (D), Funkkaserne WA 10
Energiewendeplaner GmbH, Freising (D) |
| 003 Marburg (D), Solar Pattern
AiD architecture, Kassel (D) | 031 Vaduz (FL), Active Energy Building
Univ.-Prof. Arch. Anton Falkeis, Wien (AT) |
| 004 Munznan (CH), Bürogebäude Swiss Krono
Anytech Solar, Huttwil (CH) | 032 Chemnitz (D), ENERGETIKhaus100* quartier
FASA AG, Chemnitz (D) |
| 007 Kritzendorf (AT), Zahnarztordination Dr. Schmied
Atos Architekten, Wien (AT) | 033 Chemnitz (D), ENERGETIKhaus100* urban
FASA AG, Chemnitz (D) |
| 009 Schernfeld (D), DAV Kletterhalle Eichstätt
Bauer Solarstrom, Walting (D) | 034 Hof/Saale (D), Sonnenhaus
Fickenscher Architektur+, Hof/Saale (D) |
| 010 Friedberg-Hügelshart (D), Effizienzhaus Plus-Siedlung
BayWa AG Baustoffe, München (D) | 035 Colombier (CH), Villa
FREESUNS, Colombier (CH) |
| 011 Tamins (CH), Wohnhaus Schneller Bader
Bearth & Deplazes Architekten, Chur (CH) | 036 Pforzheim (D), Wohnhochhaus
Freivogel Mayer, Ludwigsburg (D) |
| 012 Neumarkt/Oberpfalz (D), Willibald-Gluck-Gymnasium
Berschneider + Berschneider Architekten, Pilsach (D) | 037 Örebro (SWE), Reihenhäuser „Power of 10“
Friendly Building AB, Stockholm (SWE) |
| 013 Cugnasco (CH), Casa MiMa
Misha und Martina Bottinelli, Cugnasco (CH) | 038 Upplands Väsby (SWE), Reihenhäuser „Power to the People“
Friendly Building AB, Stockholm (SWE) |
| 014 Tschagguns (AT), Stall B.
Bernhard Breuer Architektur, Schruns (AT) | 039 Podgorica (MNE), UN Eco House
Architekt Daniel Fügenschuh, Innsbruck (AT) |
| 015 Thermi (GR), Brite Green
Brite Hellas, Thessaloniki (GR) | 040 Graz (AT), Wohnanlage Liebenauer Hauptstraße
GAP-Solution, Dimbach (AT) |
| 016 Seattle (USA), Angle Lake Station
Brooks + Scarpa Architects, Los Angeles (USA) | 041 Döhlau (D), Sonnenhaus Plus
Andreas Gemeinhardt, Döhlau (D) |
| 017 Bridgend (UK), Solcer House
Welsh School of Architecture, Cardiff University (UK) | 042 Tel Aviv (IL), Porter School of Environmental Studies
Geotectura - Prof. Joseph Cory, Haifa (IL) |
| 018 Heggedal (NO), Kistefosdammen Nursery
Christensen & Co. Architects, Copenhagen (DK) | 044 Freising (D), Haus Huber
Architekturwerkstatt Gmeiner-Huber, Freising (D) |
| 019 Aven (CH), Privathaus
CR Energie, Collombey (CH) | 045 Wien (AT), Stromtankstelle „Tower of Power“
Göbl Architektur, Wien (AT) |
| 020 Rovio (CH), Garage
Designergy, San Vittore (CH) | 046 Seraing (B), Cité administrative
Bureau d'Architecture Greisch, Herstal (B) |
| 021 San Vittore (CH), Ex Sedrun
Designergy, San Vittore (CH) | 047 Rønne (DK), Green Solution House
GXN/3XN, Copenhagen (DK) |
| 022 Chur (CH), Solar-Faltdach HORIZON
dhp technology, Zizers (CH) | 048 Gerzensee (CH), EFH Panoramaweg
Halle 58 Architekten, Bern (CH) |
| 023 Klaus (AT), Omicron Campus
Dietrich Untertrifaller Architekten, Bregenz (AT) | 049 Säriswil (CH), EFH Baur
Halle 58 Architekten, Bern (CH) |
| 024 Alpbach (AT), Congress Centrum
DIN A4 Architektur, Innsbruck (AT) | 050 Ludesch (AT), Safeside Headquarter
Hammerer Architekten, Aarau (CH) |
| 025 Lustenau (AT), Reihenhäuser LG
Architekturwerkstatt Dworzak-Grabher, Lustenau (AT) | 051 Wien (AT), Giraffepark - Schönbrunner Tiergarten
Architekt Dipl.-Ing. Peter Hartmann, Wien (AT) |
| 026 Jukkasjärvi (SWE), Icehotel 365
Arkitekt Hans Eek, Västerås (SWE) | 052 Oslo (NO), Housing for Youth
Haugen/Zohar Arkitekter, Oslo (NO) |
| 027 Frankfurt/Main (D), Aktiv-Stadthaus
EGS-plan, Stuttgart (CH) | 053 Berlin (D), Bundesministerium für Bildung und Forschung
Heinle, Wischer und Partner Freie Architekten, Berlin (D) |
| 028 Pfaffenhofen/Ilm (D), CO ₂ -neutrales Bürogebäude
Eichenseher Ingenieure, Pfaffenhofen/Ilm (D) | 054 Holzminden (D), Energy Campus Stiebel-Eltron
HHS Planer + Architekten, Kassel (D) |
| | 055 Ludwigsburg (D), Vertriebs-, Technologie- und Logistikzentrum
Hahn + Kolb Werkzeuge
Sigrid Hintersteiniger Architects, Stuttgart (D) |

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



- | | | | |
|-----|--|-----|--|
| 057 | Minfeld (D), Seniorenzentrum
Tim Seyfart - HTWK Leipzig (D) | 085 | Fraunberg (D), Platzüberdachung Gemeindezentrum
oberprillerarchitekten, Hörmannsdorf (D) |
| 058 | Basel (CH), Kohlesilo
Kantensprung AG, Baubüro in situ AG, Basel (CH) | 088 | Chur (CH), Kindergarten mit zwei Wohnungen
Pfleger + Stoeckli Architektur, Chur (CH) |
| 059 | Freiburg (D), Rathaus im Stühlinger
a2-solar, Erfurt (D)
ingenhoven architects, Düsseldorf (D) | 089 | Eschen (FL), EFH Gstöhl
Pfleger + Stoeckli Architektur, Chur (CH) |
| 061 | Kaiseraugst (CH), Roche Parkhaus
Jauslin Stiebler AG, Rheinfelden (CH) | 090 | Tomils (CH), EFH Balmer Ebenkofler
Pfleger + Stoeckli Architektur, Chur (CH) |
| 062 | Mönchengladbach (D), NEW Blauhaus
kadawittfeldarchitektur, Aachen (D) | 091 | Basel (CH), Grosspeter Tower
Planeco GmbH, Münchenstein (CH)
Burckhardt+Partner AG Architekten, Basel |
| 064 | Schiedam (NL), Active House
KAW, Rotterdam (NL) | 092 | Seefeld (D), Haus mit Aussicht
studioRAUCH Architektur, München (D) |
| 065 | Sterksel (NL), House of Tomorrow Today
KAW, Rotterdam (NL) | 093 | Apolda (D), Klima-Pavillon
reich architekten BDA, bluekon3, Weimar (D) |
| 066 | Kungsbacka (SWE), Kollaskolan
Kjellgren Kaminsky Architecture, Göteborg (SWE) | 094 | Aesch (CH), Solarhaus
Mark Rösli Architektur, Luzern (CH) |
| 067 | Weikersheim-Schäfersheim (D), Hof 8
Architekturbüro Klärle, Bad Mergentheim (D) | 095 | Zeeland (NL), Villa Kogelhof
Paul de Ruiter Architects, Amsterdam (NL) |
| 068 | Rif (AT), Kirche und Gemeindezentrum
Architect Walter Klasz, Innsbruck (AT) | 096 | Erding (D), Kinderhaus
S-Tech Energie, Winhöring (D) |
| 069 | Mikulychi (UKR), OptimaHouse
Architect Alexander Kucherav, Kiev (UKR) | 097 | Luzern (CH), Unterwerk Steghof
Schärli Architekten, Luzern (CH) |
| 071 | Diedorf (D), Schmuttertalgymnasium
Landkreis Augsburg (D) | 098 | Allensbach (D), Haus Behrend
schaller+sternagel architekten, Allensbach (D) |
| 072 | München (D), Siemens Headquarters
Henning Larsen GmbH, München (D) | 099 | Stuttgart (D), Renovierung + energ. Sanierung Bismarckstraße
schaller+sternagel architekten, Stuttgart (D) |
| 073 | Blatten (CH), Reka Feriendorf
Lauber IWISA AG, Naters (CH) | 100 | Sörenberg (CH), Plusenergiehaus im Entlebuch
Scheitlin Syfrig Architekten, Luzern (CH) |
| 074 | Drammen (NO), Energibygget
LOF arkitekter, Oslo (NO) | 101 | Reto & Birgit Sieber Aufterbeck, Ruswil (CH) |
| 075 | Schwertberg (AT), Vital Sonnenhaus Pro
BM ² Bau- und Projektmanagement, Schwertberg (AT) | 101 | Brütten (CH), Energieautarkes MFH
René Schmid Architekten, Zürich (CH) |
| 076 | Lindau (D), Sanierung denkmalgeschütztes Bauernhaus
Architekten May, Lindau (D) | 102 | Mailand (IT), Organische Photovoltaiktechnologie im
Deutschen Pavillon, Expo Milano 2015
Arge OPV: OPVIUS, Carl Stahl, Hager, U. I. Lapp, Merck, Schmidhuber
Arge Deutscher Pavillon: Schmidhuber Brand Experience GmbH,
Milla & Partner, Nüssli Deutschland |
| 077 | Appenzell (CH), MFH
MFW Architekten, Appenzell (CH) | 103 | Leipzig (D), Katholische Propsteikirche St. Trinitatis
Schulz und Schulz Architekten, Leipzig (D) |
| 078 | Dübendorf (CH), Solare Fitness- und Wellness Unit
Miloni Solar, Dättwil (CH) | 105 | Amsterdam (NL), Natuur & Milieu Educatiecentrum
Bureau SLA, Amsterdam (NL) |
| 079 | Porsgrunn (NO), Delta
MMW arkitekter, Oslo (NO) | 106 | Astana (KZ), Kazakistan Pavillion and Science Museum
Adrian Smith + Gordon Gill Architecture, Chicago (USA) |
| 080 | Nordhavn (DK), Copenhagen International School
Ejendomsfonden Copenhagen International School, Nord-
havn (DK)
C. F. Møller Architects, Copenhagen (DK) | 107 | Seoul (ROK), FKI Tower
Adrian Smith + Gordon Gill Architecture, Chicago (USA) |
| 081 | Diekirch (LU), Natur- und Forstverwaltung
morph4 architecture, Canach (LU) | 108 | Larvik (NO), ZEB Pilot House
Snøhetta, Oslo (NO) |
| 082 | Jomala (FI), PAF Head Office Åland
Murman Arkitekter, Stockholm (SWE) | 109 | Great Welnham (UK), Erskine Lodge
Solarcentury, London (UK) |
| 083 | Frankfurt/Main (D), EnergieHausPLUS
Nassauische Heimstätte Wohnungs- und Entwicklungs-
gesellschaft, Frankfurt/Main
EGS-plan, Stuttgart (D)
HHS Planer + Architekten, Kassel (D) | 110 | Guadalajara (MEX), Expo
solarnova Deutschland, Wedel (D) |
| 084 | Neu-Ulm (D), Effizienzhaus Plus im Altbau
o5 Architekten BDA, Frankfurt/Main (D) | 111 | Bad Waldsee (D), Haus SD
spaeth architekten, Cardiff (UK) |
| | | 112 | Stühlingen (D), Bürogebäude
Sto SE & Co. KGaA, Stühlingen (D) |
| | | 113 | Scheibbs (AT), Passivhaus Eisenstraße
Zimmermeister Adolf Strigl, Lunz/See (AT) |

ARCHITECTURAL AWARD BUILDING INTEGRATED SOLAR TECHNOLOGY 2017



- 114 Boulogne-Billancourt (FR), La Seine Musicale
TCE - Terre Ciel Energies, Anglet (FR)
- 115 Lyon (FR), Hikari Building
TCE - Terre Ciel Energies, Anglet (FR)
- 116 Koblenz (D), ECO-Effizienzhaus mit E-Mobilität
TERNES architekten BDA, Koblenz (D)
- 117 Sulzberg (AT), Haus am Berg
Juri Troy Architects, Wien (AT)
- 118 Spreitenbach (CH), PV-Fassade „Swissness“
Üser Huus AG, Hergiswil (CH)
- 119 Kassel (D), Solar Spline
Fachgebiet Experimentelles Entwerfen und Konstruieren,
Universität Kassel (D)
- 120 Aartrijke (BE), Low Energy House
atelier tom vanhee, Brussels (BE)
- 122 Sterksel (NL), Kooij Dwelling
Joris Verhoeven Architectuur, Tilburg (NL)
- 124 Flums (CH), Verwaltungsgebäude Flumroc
Viridén + Partner AG, Zürich (CH)
Flumroc AG, Flums (CH)
- 125 Zürich (CH), MFH Hofwiesen-/Rothstrasse
Viridén + Partner AG, EcoRenova AG, Zürich (CH)
- 126 Elmen (AT), Naturparkhaus Klimmbrücke
Architektur Walch und Partner, Reutte (AT)
- 127 Heubach (D), Allnatura Vertriebs GmbH
Architekturbüro Walter, Ellwangen (D)
- 128 Beirut (LB), Amir Omar Building
WEBCO s.a.r.l., Beirut (LB)
- 129 Beirut (LB), La Citadelle
WEBCO s.a.r.l., Beirut (LB)
- 130 Laax (CH), Talstation Sogn Martin
Weisse Arena Bergbahnen AG, Laax (CH)
- 131 Feldafing (D), EFH
WSM-Architekten, Pöcking (D)
- 133 Vorauf (D), Plusenergiehaus S3
Architekturbüro Ziesel, Aschau (D)
- 134 Stuttgart (D), Büro- und Laborgebäude
ZSW - Zentrum für Sonnenenergie- und Wasserstoff-
Forschung Baden-Württemberg, Stuttgart (D)
Henning Larsen GmbH, München (D)
Manz CIGS Technology GmbH, Schwäbisch Hall (D)

Out of the competition

- 043 Addis Ababa (ETH), African Union's Peace and Security
Building
Deutsche Gesellschaft für Internationale Zusammenar-
beit (GIZ),
Addis Ababa (ETH)
- 063 Zürich (CH), Gesamterneuerung Apartmenthaus
Kämpfen für Architektur AG, Zürich (CH)
- 132 North Male Atoll (Maldives), Finolhu Villas
Yuji Yamazaki Architecture, New York (USA)