

This PDF is generated from: <https://www.afasystem.info.pl/Tue-07-Jun-2016-3107.html>

Title: Solar power grid-connected energy storage

Generated on: 2026-03-27 03:01:28

Copyright (C) 2026 AFA CONTAINERS. All rights reserved.

For the latest updates and more information, visit our website: <https://www.afasystem.info.pl>

As global energy demand rises, grid instability--including power outages, voltage fluctuations, and supply-demand imbalances--poses a growing challenge. Solar energy ...

To overcome this challenge, grid-scale energy storage systems are being connected to the power grid to store excess electricity at times when it's plentiful and then ...

Grid-connected energy storage systems are crucial for maximizing the potential of renewable energy sources. They allow excess generation to be stored during peak production ...

What Is Energy Storage?Advantages of Combining Storage and SolarTypes of Energy StoragePumped-Storage HydropowerElectrochemical StorageThermal Energy StorageFlywheel StorageCompressed Air StorageSolar FuelsVirtual StorageThe most common type of energy storage in the power grid is pumped hydropower. But the storage technologies most frequently coupled with solar power plants are electrochemical storage (batteries) with PV plants and thermal storage (fluids) with CSP plants. Other types of storage, such as compressed air storage and flywheels, may have different char...See more on energy.gov#b\_results .b\_vidAns{border-radius:6px;box-shadow:0 0 0 1px rgba(0,0,0,.05);padding:16px 20px;gap:10px;background:#fff}@charset "UTF-8";#b\_results .b\_ans.b\_vidAns{box-shadow:none!important;padding:var(--smtc-gap-between-content-medium) 0!important;background:var(--bing-smtc-background-ctrl-fade-on-image-stop-0)}#b\_results .b\_ans.b\_vidAns #serpvidans.vsacf .mc\_vtvc,#b\_results .b\_ans.b\_vidAns #serpvidans.vsacf .mc\_vtvc\_th,#b\_results .b\_ans.b\_vidAns #serpvidans.vsacf .cico,#b\_results .b\_ans.b\_vidAns #serpvidans.vsacf .mc\_vtvc\_htb,#b\_results .b\_ans.b\_vidAns #serpvidans.vsacf .vrhc,#b\_results .b\_ans.b\_vidAns #serpvidans.vsacf .vrhcp,#b\_results .b\_ans.b\_vidAns #serpvidans.vsacf .vrhtc,#b\_results .b\_ans.b\_vidAns #serpvidans.vsacf .vrhtpc{border-radius:var(--mai-smtc-corner-list-card-nested-default)}#b\_results .b\_ans.b\_vidAns #serpvidans.vsacf .mmlist .mc\_vtvc,#b\_results .b\_ans.b\_vidAns #serpvidans.vsacf .mmlist

```
.mc_vtvc .mc_vtvc_meta{margin:0}#b_results .b_ans.b_vidAns #serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_channel,#b_results .b_ans.b_vidAns #serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta
.mc_vtvc_meta_row_channel{color:var(--smtc-foreground-content-neutral-primary)}#serpvidans.vsacf,#serpv
idans.vsacf .expctn .expbody,#serpvidans.vsacf
.mmlist{display:flex;flex-direction:column;gap:var(--smtc-gap-between-content-medium)}#serpvidans.vsacf
.cico{height:auto}#serpvidans.vsacf .mc_vtvc_ban_lo{top:0;right:auto}#serpvidans.vsacf .mc_cwvc .mc_vtvc
.mc_vtvc_meta,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta{height:auto;padding:var(--smtc-gap-between-content-xx-small) 0
var(--smtc-gap-between-content-xx-small)
var(--smtc-gap-between-content-medium);display:flex;flex-direction:column;justify-content:space-between}#
serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta .mc_vtvc_title,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta
.mc_vtvc_title{color:var(--smtc-ctrl-link-foreground-brand-rest);font:var(--bing-smtc-text-global-body2);heig
ht:auto;display:-webkit-box;-webkit-line-clamp:2;-webkit-box-orient:vertical}#serpvidans.vsacf .mc_cwvc
.mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block_area,#serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block,#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block_area,#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block{display:flex;flex-direction:column;gap:var(--smtc-padding-ctrl-text-side)}#serpvidans.
vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block_area .mc_vtvc_meta_row,#serpvidans.vsacf
.mc_cwvc .mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_row,#serpvidans.vsacf .mmlist
.mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block_area .mc_vtvc_meta_row,#serpvidans.vsacf .mmlist
.mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_row
.mc_vtvc_meta_row{color:var(--smtc-foreground-content-neutral-primary);height:var(--mai-smtc-padding-car
d-default);font:var(--bing-smtc-text-global-caption1)}#serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block_area .mc_vtvc_meta_row .mc_vtvc_meta_row_channel::before,#serpvidans.vsacf
.mc_cwvc .mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_row
.mc_vtvc_meta_row_channel::before,#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block_area .mc_vtvc_meta_row .mc_vtvc_meta_row_channel::before,#serpvidans.vsacf
.mmlist .mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_row
.mc_vtvc_meta_row_channel::before{content:" ? "}#serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block_area .mc_vtvc_meta_pubdate,#serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block .mc_vtvc_meta_pubdate,#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block_area .mc_vtvc_meta_pubdate,#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block
.mc_vtvc_meta_pubdate{color:var(--bing-smtc-foreground-content-neutral-tertiary);padding-bottom:0}.vsacf
.mc_cwvc .mc_vtvc_con_rc,.vsacf .mmlist .mc_vtvc_con_rc{display:flex}.vsacf .mc_cwvc .mc_vtvc_con_rc
.mc_vtvc_meta_w,.vsacf .mmlist .mc_vtvc_con_rc .mc_vtvc_meta_w{height:auto}.vsacf
.b_title{padding-left:var(--mai-smtc-padding-card-default)}.vsacf .b_title
```

```
.mmtitle { font: var(--bing-smtc-text-global-subtitle1-strong); margin-bottom: 0 } .vsacf .b_title .mmtitle
a::after { content: ""; margin: 5px 5px 0 0; border-top: 2px solid
var(--smtc-foreground-content-neutral-primary); border-right: 2px solid
var(--smtc-foreground-content-neutral-primary); background-size: 7px
7px; width: 7px; height: 7px; transform: rotate(45deg); display: inline-block; margin-left: 4px } #serpvidans.vsaf
.b_title .mmtitle { margin-bottom: 0 } #serpvidans.vsaf .b_title .mmtitle
a { color: var(--smtc-foreground-content-neutral-primary) } #serpvidans.vsaf .cardless.mmlist
.mc_vtvc_con_rc, #serpvidans.vsaf .cardless.mmlist .mc_vtvc_th { height: auto } #serpvidans.vsaf
.vsb_tr_c.va_tt { margin: 0 } #serpvidans.vsaf .vtbc .mv_vtvc_play, #serpvidans.vsaf .vtbc
.mv_vtvc_play_ext { position: static } #serpvidans.vsaf .va_tt
.mc_vtvc_ban_lo { display: block } #serpvidans.vsaf
.mc_bc { width: auto; border-radius: var(--smtc-ctrl-badge-sm-corner); padding: var(--smtc-padding-ctrl-text-side)
var(--smtc-gap-between-content-xx-small) } #serpvidans.vsaf .rmts .mc_bc
ems { display: none } #serpvidans.vsaf a.vsb_tr_t { color: var(--smtc-foreground-content-neutral-primary) } .vsacf
.va_tt .vsb_tr_chd .mc_vtvc_th_dock.rmoverlay { height: 36px } .vsacf .va_tt .vsb_tr_chd
.mc_vtvc_th_dock { height: 92px; background: linear-gradient(180deg, var(--bing-smtc-background-ctrl-fade-on-i
mage-stop-0) 0%, var(--mai-smtc-background-ctrl-on-image-rest) 100%) } .vsacf .va_tt a.vsb_tr_t { padding: 0
20px; font: var(--acf-font-title-2-strong) } .vsacf .va_tt .vsb_tr_chd .mc_vtvc .mc_vtvc_meta, .vsacf .va_tt
.vsb_tr_chd .mc_vtvc .mc_vtvc_title { color: var(--mai-smtc-foreground-ctrl-on-image-rest) } .vsacf
span.vcmt_ett { font: var(--bing-smtc-text-global-caption2); margin: var(--smtc-gap-between-content-xx-small) 0
0; height: 16px } #serpvidans.vsaf .vsb_tr_chd .mc_vtvc_tot .mc_vtvc_title
strong { font-size: 14px; line-height: 20px; display: unset } #serpvidans.vsaf .va_tt .b_sldrp
.slide:not(:first-child) { margin-left: var(--smtc-gap-between-content-small) } #serpvidans.vsaf .va_tt
.vsb_tr_chd .mc_vtvc
.mc_vtvc_title { white-space: normal; display: -webkit-box; -webkit-line-clamp: 2; -webkit-box-orient: vertical } #se
rpvidans.vsaf .b_module_expansion_control .b_btnContainer
.b_CompactExpansion { background-color: var(--bing-smtc-background-ctrl-neutral-rest); display: flex; justify-co
ntent: center; align-items: center; gap: 4px; width: fit-content; height: auto; padding: 8px 12px } #serpvidans.vsaf
.b_module_expansion_control .b_btnContainer .b_CompactExpansion
.b_CompactExpansionBtnText { font: var(--bing-smtc-text-global-caption1-strong); color: var(--bing-smtc-foregr
ound-content-brand-rest) } #serpvidans.vsaf .b_module_expansion_control .b_btnContainer
.b_CompactExpansion .b_arrow { display: flex; margin: 0; height: auto } #serpvidans.vsaf
.b_module_expansion_control .b_btnContainer .b_CompactExpansion .b_arrow
path#Shape { fill: var(--bing-smtc-foreground-content-brand-rest) } #serpvidans.vsaf
.b_module_expansion_control
.b_btnContainer::after { content: ""; position: absolute; width: 100%; bottom: 20px; left: 0; height: 1px; border-radius:
1px; background: var(--smtc-stroke-ctrl-on-neutral-rest) } #b_results
.b_ans.b_vidAns { box-shadow: none; padding: 12px 20px 0 } #b_results .b_ans.b_vidAns
.vasac { padding: unset; margin: 0 } #b_results .b_ans.b_vidAns .vsa .b_attribution { padding-bottom: 0 } #b_results
```

```
.b_ans.b_vidAns .cardless .salink{margin:0}#b_results .b_ans.b_vidAns .mmlist
.mc_vtvc{margin-top:10px}#b_results .b_ans.b_vidAns .mmlist .mc_vtvc
.mc_vtvc_meta{display:flex;flex-direction:column;justify-content:space-between;margin:0 10px 4px
12px}#b_results .b_ans.b_vidAns .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_channel{color:#111}#b_results .b_ans.b_vidAns .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_row_channel,#b_results .b_ans.b_vidAns .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block_area{color:#666}#b_results .b_ans.b_vidAns .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block_area{bottom:0;height:unset}.b_dark .vsa.cardless
.mc_vtvc{background-color:unset}.b_CompactExpandText{display:inline}#serpvidans
.b_module_expansion_control{padding-bottom:0}#serpvidans .b_module_expansion_control
.b_CompactExpansion{height:40px;line-height:40px;bottom:-6px;padding-left:20px;padding-right:20px;bord
er-radius:20px;z-index:6}#serpvidans .b_module_expansion_control
.b_CompactExpansionBtnText{line-height:40px}#serpvidans .btitle .b_topTitle,#serpvidans .mc_vtvc
.mc_vtvc_title{margin-bottom:0}#serpvidans
.mc_vtvc_meta_pubdate{padding-bottom:0}#serpvidans{position:relative;--va-extbody-padding:0 0
24px;--va-ptop:0px;--va-pbop:0px}#serpvidans
.expbody{overflow-x:visible!important;overflow-y:clip!important;box-sizing:border-box;padding:var(--va-ex
tbody-padding)}#serpvidans.ssize .expbody{max-height:calc(375px - var(--va-ptop) -
var(--va-pbop))}#serpvidans.msize .expbody{max-height:calc(535px - var(--va-ptop) -
var(--va-pbop))}#serpvidans.lsize .expbody{min-height:536px}#serpvidans .b_removeShadow
.expbody{max-height:unset}#serpvidans .b_removeShadow .expbody .grad,#serpvidans .b_removeShadow
.expbody .expext{display:none}#b_results
.b_ans.b_vidAns{--va-ptop:16px;--va-pbop:0px;--va-pleft:20px;--va-pright:20px;border-radius:6px;box-shado
w:0 0 0 1px rgba(0,0,0,.05);padding:var(--va-ptop) var(--va-pright) var(--va-pbop)
var(--va-pleft);margin-bottom:30px;gap:10px}#b_results .b_ans.b_vidAns .b_moreLink{padding:9px 0 0
0}.mmtitle>a{display:block}.mc_fh{height:100%;border-radius:6px}.mc_tc_bs{overflow:hidden}.mmlist
.mc_vtvc .mc_vtvc_meta { padding: 12px 16px 16px 16px; } .mmlist .mc_vtvc .mc_vtvc_meta_w { height:
112px; margin-top: -0px; } .mmlist .mc_vtvc .mc_vtvc_title { height: 44px; line-height: 22px; margin-bottom:
0px; margin-top: 0px; } .mmlist .mc_vtvc .mc_vtvc_meta_block_area { height: 40px; } .mmlist .mc_vtvc
.vtmu, .mmlist .mc_vtvc .vtpl { bottom: 120px; } .mmlist .mc_vtvc_th_dock { height: 112px; } .mmlist
.mc_vtvc_th .cico { height: 131px; } .mc_vtvc{background-color:#fff;box-shadow:0 0 0 1px
rgba(0,0,0,.05);line-height:0;margin:0;position:relative;border-radius:6px;overflow:hidden}.mc_vtvc.noshado
w{box-shadow:none}.mc_vtvc_con_rc{border-radius:6px;overflow:hidden;position:relative}.mc_vtvc>a{colo
r:#71777d;display:block;text-decoration:none;width:100%}.mc_vtvc>a:focus::after{outline:2px solid
#00a89d;width:100%;height:100%;content:"";outline-offset:-2px;position:absolute;top:0;left:0}.mc_vtvc_th{b
ackground-color:#d5d5d5;position:relative}.mc_vtvc_th
.cico{border-radius:0}.mc_vtvc_ban_lo,.mc_vtvc_ban_up{position:absolute;vertical-align:middle}.mc_vtvc_
ban_lo{bottom:0}.mc_vtvc_ban_up{top:0}.mc_vtvc_title{font-weight:normal;margin-bottom:11px;overflow:
hidden;color:#111;height:54px;line-height:18px}.mc_vtvc_title
```

```
a{display:inline-block;color:#111}.mc_vtvc_title
a:hover{text-decoration:underline}.mc_vtvc_src_ico{float:left;margin-right:4px}.mc_vtvc_act{height:16px;margin-top:-40px;padding:12px 8px;z-index:1}.mc_vtvc_actc{right:16px;bottom:16px;position:absolute;display:inline-block;z-index:1}.mc_vtvc_act_sep{border-top:1px solid #d5d5d5;height:40px;margin:0 8px}.mc_vtvc_fh .mc_vtvc_act_sep,.mc_vtvc_fh .mc_vtvc_act{visibility:hidden}#serpvindans
.b_topTitle{margin-bottom:8px}.mc_vtvc_htc{width:100%;height:100%;position:absolute;top:0;bottom:0;left:0;right:0}.mc_vtvc_htb{width:100%;height:100%;background:rgba(0,0,0,.7);position:absolute;top:0;bottom:0;left:0;right:0}.mc_vtvc_ht{width:100%;padding:0 16px;line-height:16px;color:#fff;text-decoration:underline;word-break:break-word;box-sizing:border-box;vertical-align:middle;text-align:center}.mc-vtvc_th_live_b{background-color:#c80000;color:#fff;display:inline-block;padding:2px 8px;font:11px/14px Arial;border-radius:2px;text-transform:uppercase;height:15px;width:26px;position:absolute;left:8px;top:110px}.isvctrl .isv
.mc_vtvc_ban_up{left:0;right:initial}.mc_vtvc_ban_lo,.mc_vtvc_ban_up{right:0}.vt_text.b_IRight
.b_ILeft{margin:0 0 0 1px;height:14px;line-height:14px;padding:2px 8px;background:rgba(0,0,0,.75);border-radius:2px;font-weight:bold}.mc_vthtb{width:100%;height:100%;background:rgba(0,0,0,.7);position:absolute;top:0;bottom:0;left:0;right:0;display:table}.mc_vtht{width:100%;padding:0 16px;line-height:16px;color:#fff;text-decoration:underline;word-break:break-word;box-sizing:border-box;vertical-align:middle;text-align:center;display:table-cell}.vt_text.b_IRight .b_ILeft{margin:0 0 0 1px;height:14px;line-height:14px;padding:2px 8px;background:rgba(0,0,0,.75);border-radius:2px;font-weight:bold}.emptyStyleForDebuggingPurpose{top:0}.emptyStyleForDebuggingPurpose{top:0}.mc_vtvc_center_play{width:32px;height:32px;background-size:contain;position:absolute;margin:auto;bottom:0;top:0;left:0;right:0;box-shadow:none;border-radius:0}.mc_vtvc_center_play.rmvbg{width:32px;height:32px;background-image:none}.mc_vtvc_htb,.mc_vtvc_ht{display:none}.vt_onhv .mc_vtvc_htb{display:table}.vt_onhv
.mc_vtvc_ht{display:table-cell}.mc_vtvc_center_play{display:inline-block}.vt_onhv
.mc_vtvc_center_play{display:none}.mc_vtvc .vtmu,.mc_vtvc .vtpl{bottom:163px}.vsarf .mc_vtvc .vtmu,.vsarf .mc_vtvc .vtpl{bottom:122px}.svarh #mmcar .mc_vtvc .vtmu,.svarh #mmcar .mc_vtvc .vtpl{bottom:137px}.svarht #mmcar .mc_vtvc .vtmu,.svarht #mmcar .mc_vtvc .vtpl{top:8px;left:8px}.mc_vtvc_center_play{background-image:url(data:image/svg+xml,%3Csvg%20width%3D%2232%22%20height%3D%2232%22%20viewBox%3D%220%200%2032%2032%22%20fill%3D%22none%22%20xmlns%3D%22http%3A%2F%2F%2F2000%2Fsvg%22%3E%0D%0A%20%20%20%20%3Crect%20width%3D%2232%22%20height%3D%2232%22%20rx%3D%2216%22%20fill%3D%22black%22%20fill-opacity%3D%220.6%22%2F%3E%0D%0A%20%20%20%20%3Cpath%20d%3D%22M14.2354%2010.1923C13.2355%209.62986%2012%2010.3524%2012%2011.4997V20.5C12%2021.6472%2013.2355%2022.3698%2014.2354%2021.8073L22.2356%2017.3073C23.2551%2016.7339%2023.2551%2015.2661%2022.2357%2014.6926L14.2354%2010.1923Z%22%20fill%3D%22white%22%20fill-opacity%3D%220.9%22%2
```

```
F%3E%0D%0A%3C%2Fsvg%3E)}.mmlist .mc_vtvc{margin:10px 1px 0}.mmlist
.mc_vtvc_con_rc{display:flex}.cardless .mmlist .mc_vtvc_con_rc{height:112px}.mmlist .mc_vtvc
.mc_vtvc_meta{display:flex;flex-direction:column;justify-content:space-between;margin:0 10px 4px
12px;padding:0}.mmlist
.mc_vtvc_title{font-weight:400;font-size:16px;height:44px;line-height:22px;margin-bottom:0;margin-top:0;c
olor:unset}.mmlist .mc_vtvc_meta_row{font-size:13px}.mmlist .mc_vtvc
.mc_vtvc_meta_block_area{height:unset}.mmlist .mc_vtvc .vtmu,.mmlist .mc_vtvc
.vtpl{bottom:8px}.cardless .mmlist .mc_vtvc{box-shadow:none}.cardless.mmlist
.mc_vtvc_center_play{width:32px;height:32px}.cardless.mmlist
.mc_vtvc_title{font-size:16px;color:unset}.cardless.mmlist
.mc_vtvc_meta_row{line-height:20px}.cardless.mmlist
.mc_vtvc_meta_pubdate{padding-bottom:2px;color:#666}.cardless.mmlist .mc_vtvc_th,.cardless.mmlist
.mc_vtvc_th .cico,.cardless.mmlist .mc_vtvc_th div.rms_img{border-radius:6px}.cardless.mmlist
.mc_vtvc_th{height:111px}.cardless.mmlist
.mc_vtvc_htc{border-radius:6px;overflow:hidden}#serpvidans.vasac.cardless{box-shadow:none}.cardless.m
mmlist .mc_bc{padding:2px 8px;line-height:14px;border-radius:2px;font-weight:normal}.mc_vtvc:hover
.mc_vtvc_title{text-decoration:underline}.mc_vtvc_meta{box-sizing:border-box;display:inline-block;line-hei
ght:18px;position:relative;width:100%}.mc_vtvc_meta_block{bottom:0;position:absolute;width:100%}.mc_v
tvc_meta_row{line-height:16px;font-size:11px;height:17px;overflow:hidden;text-overflow:ellipsis;white-spac
e:nowrap}.mc_vtvc_meta_row a{display:inline-block}.mc_vtvc_meta_row
a:hover{text-decoration:underline}.mc_vtvc_meta_block_area{position:relative}.mc_vtvc_meta_block,.mc_v
tvc_meta_block a{color:#444}.b_dark
.mc_vtvc_meta_block{color:#edebe9}.mc_vtvc_meta_row>:nth-of-type(n+2)::before{content:"
?".mc_vtvc_meta_row .mc_vtvc_meta_row_channel::before{content:">
?".mc_vtvc_kmt_title{line-height:18px;padding-bottom:4px;font-weight:bold;color:#00809d;text-transform:u
ppercase;font-size:11px}.mc_vtvc_kmt,.mc_vtvc_con_rc.onhov .wkmt
.mc_vtvc_meta_row,.mc_vtvc_con_rc.onhov .wkmt .tbc_tt{display:none}.mc_vtvc_con_rc.onhov .wkmt
.mc_vtvc_title{max-height:18px;margin-bottom:18px;overflow:hidden}.mc_vtvc_con_rc.onhov.mmsts
.mc_vtvc_title{visibility:hidden}.mc_vtvc_con_rc.onhov
.mc_vtvc_kmt{display:block}.mc_vtvc_kmt_content
.b_factrow{line-height:17px;font-size:11px;max-height:34px;overflow:hidden;text-overflow:ellipsis;padding:
0 16px 0 0;color:#444}.mc_vtvc_meta
.mc_vtvc_kmt_title{line-height:18px}.mc_vtvc_title:hover{text-decoration:none}.mc_vtvc_meta_pubdate{co
lor:#444;padding-bottom:3px}.mc_vtvc_meta_channel{color:#444}.mc_vtvc_meta_w,.mc_vplvc_meta_w{po
sition:relative}.mc_vtvc_meta_bg_w,.mc_vplvc_meta_bg_w{height:100%;width:100%;overflow:hidden;posit
ion:absolute;top:0}.mc_vtvc_meta_bg_w .cico,.mc_vplvc_meta_bg_w
.cico{border-radius:0;overflow:visible}.dg_u .mm_vidch_th_c{overflow:visible}.dg_u .mm_vidch_th_bg
img{margin-top:-20px}.emptyStyleForDebuggingPurpose{top:0}.mc_vtvc_meta_w
.mc_vtvc_meta{background:rgba(255,255,255,.75)}.mc_vtvc_meta_bg_w img,.mc_vtvc_meta_bg_w
```

```
.mc_vtvc_cb_w{filter:blur(25px);transform:scale(1.2)}body{--video-metadata-channel-color:#3c3c3c}body.b
_dark{--video-metadata-channel-color:unset}.vsarf .mc_vtvc_meta_pubdate{color:unset}.vsarf
.mc_vtvc_meta_channel{color:var(--video-metadata-channel-color)}.vsarf .mc_vtvc .mc_vtvc_meta_w
.mc_vtvc_title,.vsarf .mc_vtvc .mc_vtvc_meta_w .mc_vtvc_title strong{font-weight:bold}.vsarf
.mc_vtvc_meta_w .mc_vtvc_meta_row{font-size:13px}.emptyStyleForDebuggingPurpose{top:0}.vsarf
.mc_vtvc_th
.cico{height:132px}.emptyStyleForDebuggingPurpose{top:0}.emptyStyleForDebuggingPurpose{top:0}.empt
yStyleForDebuggingPurpose{top:0}.emptyStyleForDebuggingPurpose{top:0}.emptyStyleForDebuggingPurp
ose{top:0}.emptyStyleForDebuggingPurpose{top:0}.emptyStyleForDebuggingPurpose{top:0}.vtbc
.mv_vtvc_play{display:inline-block;position:absolute;bottom:8px;left:9px;height:8px;width:7px}.vtbc
.mv_vtvc_play_ext{background:url(/rp/Lp38sn_O4jegSK0IHxZVxyp-yKQ.png) -172px
-31px;display:inline-block;height:8px;width:12px;position:absolute;bottom:8px;left:6px}.vtbc
.pivot{height:20px;width:8px;min-width:8px}.vtbc
.mv_vtvc_play{background:url(
MAAADHKvg1AAAIVBMVEX////////////////////9/gMdvAAACnRSTIMAETNEVWaImbv
uo4D1oAAAAB9JREFUCB1jmMoABKuaQcSqQhCxKgFGgLhNQIkpQAwA8zkLyQA16F0AAAASUVO
RK5CYII=)}.mc_bc_w{height:18px;padding:8px;text-align:right}.mc_bc{background-color:rgba(0,0,0,.75);p
adding:2px
8px;line-height:14px;color:#fff;display:inline-block;vertical-align:middle;border-radius:2px;font-weight:bold}
.mc_bc_w .pivot{text-align:center;margin-right:1px;height:14px}.vsarr .mmgrid .mc_bc_w
.mc_bc{background-color:rgba(0,0,0,.75);opacity:1}.mmsi{height:16px;width:16px;position:relative;top:5px;
padding-right:var(--smtc-gap-between-content-xx-small)}.mmsi-microsoftnews,.mmsi-msn{top:3px}.vrhdata
{display:none}.mmgrid>div{width:197px;display:inline-block;margin-right:8px;margin-bottom:8px;box-shad
ow:0 0 0 1px
rgba(0,0,0,.05);position:relative;vertical-align:top;overflow:hidden;white-space:normal;border-radius:6px}.vs
arr .mmgrid>div,.vsarr1stbig .mmgrid>div{margin-right:8px;margin-bottom:8px}#serpvidansrr .mc_vtvc
.mc_vtvc_meta{height:auto}#serpvidansrr .mc_vtvc
.mc_vtvc_title{display:-webkit-box;-webkit-line-clamp:2;-webkit-box-orient:vertical}.mmgrid
.mc_tc{border:0}.vsa .mmgrid>div:nth-child(3n){margin-right:0}.vsa
.b_moreLink{padding-top:4px}#serpvidansrr
.mc_vtvc_meta_row{line-height:18px;font-size:100%;height:17px}.vsarr
.mmgrid>div:nth-child(2n){margin-right:0}#serpvidansrr .mc_vtvc .vtmu,#serpvidansrr .mc_vtvc
.vtpl{bottom:128px}.vsarr1stbig .mmgrid>div:nth-child(2){margin-right:0}#serpvidansrr.uipolish
.mc_vtvc_meta_pubdate,#serpvidansrr.uipolish .mc_vtvc_meta_channel,#serpvidansrr.uipolish #vidans2
.b_videocard .video_metadata .video_source{color:#767676}#serpvidansrr #vidans2 .b_videocard
.video_metadata_container,#serpvidansrr #vidans2 .b_videocard .video_metadata_container
.video_metadata>h3{width:100%}@media(max-width:1362.9px){#serpvidansrr
.mmgrid>div{width:168px;height:206px}#serpvidansrr .mmgrid>div .cico,#serpvidansrr .mmgrid>div .cico
.rms_img{width:168px;height:100px}#serpvidansrr .mc_vtvc .mc_vtvc_meta{padding:12px}#serpvidansrr
```

```
.mc_vtvc .mc_vtvc_title{height:32px;line-height:16px;margin-bottom:16px}#serpvidansrr .mc_vtvc
.mc_vtvc_meta_block_area{height:34px}#serpvidansrr
.mc_vtvc_meta_row{line-height:15px;font-size:13px;height:15px}#serpvidansrr
.mc_vtvc_meta_pubdate{padding-bottom:4px}#serpvidansrr .mc_vtvc .vtmu,#serpvidansrr .mc_vtvc
.vtpl{bottom:114px}#serpvidansrr #vidans2 .b_videocard .videoPlayer,#serpvidansrr #vidans2 .b_videocard
.videoPlayer .cico,#serpvidansrr #vidans2 .b_videocard .videoPlayer .cico
.rms_img{width:343px!important;height:194px!important;margin-right:0} @media(max-width:1274.9px){#s
erpvidansrr .mmgrid>div{width:124px;height:164px}#serpvidansrr .mmgrid>div .cico,#serpvidansrr
.mmgrid>div .cico .rms_img{width:124px;height:76px}#serpvidansrr .mc_vtvc
.mc_vtvc_meta{padding:8px}#serpvidansrr .mc_vtvc
.mc_vtvc_title{height:32px;line-height:16px;margin-bottom:12px}#serpvidansrr .mc_vtvc
.mc_vtvc_meta_block_area{height:28px}#serpvidansrr
.mc_vtvc_meta_row{line-height:13px;font-size:11px;height:13px}#serpvidansrr
.mc_vtvc_meta_pubdate{padding-bottom:2px}#serpvidansrr .mc_vtvc .vtmu,#serpvidansrr .mc_vtvc
.vtpl{bottom:96px}#serpvidansrr #vidans2 .b_videocard .videoPlayer,#serpvidansrr #vidans2 .b_videocard
.videoPlayer .cico,#serpvidansrr #vidans2 .b_videocard .videoPlayer .cico
.rms_img{width:256px!important;height:144px!important;margin-right:0}#serpvidansrr .maskthumb
.mc_bc_w{padding:8px 4px 4px 8px}#serpvidansrr.withsplitline
.mmgrid>div:nth-last-child(1),#serpvidansrr.withsplitline
.mmgrid>div:nth-last-child(2){margin-bottom:24px}#serpvidansrr.withsplitline .mmgrid{border-bottom:1px
solid #ecec; margin-bottom:16px}#serpvidansrr #vidans2 .b_videocard
.video_metadata{max-width:auto;padding:12px 16px}#serpvidansrr #vidans2
.b_videocard{margin-bottom:12px;box-shadow:0 0 1px rgba(0,0,0,.05),0 2px 3px
rgba(0,0,0,.1);border-radius:6px}#serpvidansrr .b_rich{padding-top:0}#serpvidansrr #vidans2
.videoPlayer{border-radius:6px 6px 0 0;overflow:hidden}#serpvidansrr #vidans2 .b_videocard
.video_metadata>h3{white-space:nowrap;overflow:hidden;text-overflow:ellipsis;-webkit-line-clamp:1;line-he
ight:15px;height:15px;font-size:13px;color:#000;margin-bottom:20px;font-family:"Arial",Helvetica,Sans-Seri
f;font-style:normal;display:block}#serpvidansrr.vsarr1stbig #vidans2 .b_videocard .video_metadata
.actionmenu{display:none}#serpvidansrr #vidans2 .b_videocard .video_summary,#serpvidansrr #vidans2
.b_videocard .video_source{line-height:15px}#serpvidansrr #vidans2 .b_videocard .videoPlayer
.vtbc{right:0}.vrhc line.nhvpv .pffvi,.vrhc line.nhvpv[data-tps="S"] .pffvt,.vrhc line.nhvpv[data-tps="M"]
.pffvt,.vrhc line.nhvpv[data-tps="L"] .pffvt{display:inline-flex}.vrhc line.nhvpv .vrhtc.pffv
.vrhol{display:none}.vrhc line.nhvpv .vrhtc.pffv
.player_ol{background:var(--mai-smtc-background-ctrl-on-image-hover);transition:background-color
.5s;display:flex;align-items:center;justify-content:center;padding:var(--smtc-gap-between-content-x-small);ga
p:var(--smtc-gap-between-content-x-small);box-sizing:border-box}.mc_vtvc_th img{transition:all .3s
ease-out}.nhvpv+.mc_vtvc_th
img{transform:scale(1.1)}.smtplayerhtml5{height:100%;width:100%;overflow:hidden}.smtplayerhtml5
video{min-height:100%;min-width:100%}.smtplayerhtml5
```

```
.videoplaying{background-color:#000}.smtplayerhtml5.hide{display:none}.pffvt{display:none;color:var(--mai-smtc-foreground-ctrl-on-image-rest);font:var(--bing-smtc-text-global-subtitle2-strong)}.pffvi{mask:url(/rp/ui07wU6K7FR_inzG7DRbP1i8fGo.svg)centerno-repeat;mask-size:12px;background:var(--bing-smtc-background-card-on-image-default);width:20px;height:20px;flex-shrink:0;align-self:flex-start}[data-tps="L"]
.pffvt{font:var(--bing-smtc-text-global-subtitle2-strong)}[data-tps="L"]
.pffvi{width:22px;height:22px;mask-size:16px}[data-tps="S"] .pffvt{font-size:0}[data-tps="S"]
.pffvi{width:24px;height:24px;mask-size:24px;align-self:center}.hvpv.h5s
.pffvt{display:inline-flex}.hvpv.h5s .vrhtc.pffv .vrhol{display:none}.hvpv.h5s .vrhtc.pffv
.player_ol{background:var(--mai-smtc-background-ctrl-on-image-hover);transition:background-color
.5s;display:flex;align-items:center;justify-content:center;padding:var(--smtc-gap-between-content-x-small);ga
p:var(--smtc-gap-between-content-x-small);box-sizing:border-box}.pffvt{text-decoration:underline}.vrhchp
.vrhol{position:absolute;width:100%;height:35px;max-height:35px;bottom:0;left:0;padding:0;background:none;
display:block;z-index:9}.vrhchp .vrhol.hide,.vrhchp .vrhol
.hide{display:none}.vrhot{white-space:nowrap;text-overflow:ellipsis;overflow:hidden;display:inline-block;po
sition:absolute;max-width:240px;height:18px;line-height:14px;margin-left:8px;top:10px;left:0;right:0;border-
radius:2px;padding-right:8px}.vrhot div{display:inline-block}.vrhot
nt{color:#fff;font-size:11px;font-weight:bold;background-color:rgba(0,0,0,.75);padding:2px
8px;margin-left:0;top:0;box-sizing:border-box;position:relative}.vrhc
.icons{position:absolute;right:8px;top:10px;left:auto;bottom:auto;height:18px;display:inline-block;cursor:poi
nter}.vrhol.icons_1 .vrhot{margin-right:27px}.vrhol.icons_2 .vrhot{margin-right:49px}.vrhol.icons_3
.vrhot{margin-right:79px}.vrhol .vrhot .vsb_tr_chd .vrhol.icons_1
.vrhot{margin-right:0}.vpb{position:absolute;display:block;bottom:0;left:0;height:4px}.vpb
div{position:absolute}.vpb .vrhot{width:0;background:#fff}.vpb
nt.test{display:none}.vpb.back{background-color:#999}.vrhchp
.vrhol.npb{height:36px;max-height:36px}.vrhol
.vadda{width:22px;height:18px;padding:0;margin-right:0;margin-left:2px;bottom:0;position:relative;display:i
nline-block;z-index:1;background:rgba(0,0,0,.75);border-radius:2px;overflow:hidden}.vrhol
.vadda.hide{display:none}.vrhol .vadda .mc_vfaa{margin:3px 5px}.ricons .vol{float:left}.ricons
.adultFlag{float:right}.vol{width:22px;height:18px;bottom:0;margin-left:1px;margin-right:1px;position:relati
ve;display:inline-block}.vol.hide,.vol .hide{display:none}.vol
.bg{background:rgba(0,0,0,.75);border-radius:2px}.vol.bg,.vol .vrhot{position:absolute;bottom:0}.vol
.vol.bg.volnb{border-radius:0 0 2px 2px}.vol .volsliderHandle.bg{border-radius:2px 2px 0 0}.vol .nt
.volsliderHandle{height:70px;display:none;width:22px;float:left;bottom:18px;position:absolute;display:block
}.vol .vrhot .volsliderHandle.hide{display:none}.volsliderHandle
.vsb{height:54px;width:4px;background-color:#999;margin:9px auto
8px;position:relative;display:block;border-radius:2px}.volsliderHandle
.vsh{height:6px;width:14px;padding:9px 7px 9px 7px;margin:0
-12px;display:block;position:absolute;top:30px}.volsliderHandle .vsh.hide{display:none}.volsliderHandle
```

```
.vshi{height:4px;width:14px;background-color:#fff;border-radius:2px}.volMuteIcon{width:16px;height:14px;
margin:2px
4px;float:left}.volMuteHandle{width:22px;height:18px}.vo{background:url(/rp/ffZxBXEIP9WYOO0jhTaEl
yLhEVU.svg)
no-repeat}.vm{background:url(/rp/fsX-ZVd03wB2TL0vmQJxSp4U9vs.svg)
no-repeat}.vl{background:url(/rp/YXYMPC1Rry_XJGc7Yg8lR4B2eEs.svg)
no-repeat}.vf{background:url(/rp/NoslR4amKTs1zYxWy3laZN3HRk.svg)
no-repeat}@media(forced-colors:active){.vol{forced-color-adjust:none}.vrhc
line
.vt_vp,.vrhc.popout
.vt_vp,.vrhc.mousefollow
.vt_vp{position:absolute;bottom:0;border:hidden;padding:0;top:0;left:0;z-index:3}.vrhc
.hide{display:none}.vrh_clc
.vt_vp,.vrh_clc
.vrhc
.vrhi,.vrh_clc
.player_ol{cursor:pointer}.vrh_clc
.cico{border-radius:0}.vrhc{border:hidden;top:0;left:0;padding:0}.vrhc.mousefollow
.vrhc,.vrhc.popout
.vrhc{background-color:#999}.vrhpc.load
.player_ol{background:url(/rp/J_o2maogFDeUOsovPjL-ofEuxJ4.gif)centercenterno-repeat}.vrhc
line
.vrhc
.vrhi,.vrhc.popout
.vrhc
.vrhi,.vrhc.mousefollow
.vrhc
.vrhi{position:absolute!important;border:hidden;z-index:2;padding:0;left:0;top:0}.player_ol{position:absolute
;width:100%;height:100%;bottom:0;border:hidden;z-index:7}.vrhc.popout,.vrhc
line,.vrhc.mousefollow{border-radius:6px;overflow:hidden;display:table-row-group;background:none}.vrhc.p
opout,.vrhc.mousefollow{z-index:4;box-shadow:0 4px 4px rgba(0,0,0,.1),0 2px 80px rgba(0,0,0,.2)}.vrhc
line{z-index:1;margin:0}.vrhc.popout,.vrhc
line{position:absolute;top:0}.vrhc.popout{border:1px
solid
#fff}.vrhc.mousefollow{position:fixed}.vrhpc{position:relative;top:0;left:0;display:table-row}.vrhpc
.vrhc{position:relative;overflow:hidden}.vrhc.hide{display:none}@keyframes
vh_fadein{from{opacity:0}to{opacity:1}}.vrhc.not(.hide){animation:vh_fadein
250ms}.vrhc
line
img{color:transparent}.vrhc
line.fullsize{height:100%}.vrhc,.vrhc.hover,.vrhc.link,.vrhc.active,.vrhc.visited{color:#000;text-decoration:no
ne}.vrhc.vrh_clc{cursor:pointer}a.hover-anchor{display:block;height:100%;width:100%;text-decoration:none
}.vrhstat{height:0;overflow:hidden}.grad{width:100%;height:24px;position:absolute;bottom:0;background:lin
ear-gradient(180deg,rgba(255,255,255,0)
0%,#fff
100%)).b_drk
.grad,.b_dark
.grad{background:linear-gradient(180deg,rgba(41,40,39,0)
0%,#292827
95%)).b_module_expansion_control{padding-bottom:4px}.b_module_expansion
.b_expansion_wrapper{border-top:1px
solid
#cdcdcd}.b_module_expansion_control.b_module_head>.b_module_expansion
.b_expansion_wrapper{border-top:0}.b_module_expansion
.b_expmob_rc{border-top:0}.b_module_expansion
.b_expansion_wrapper,.b_module_expansion
.b_offpage_expansion
a,#b_results
.b_module_expansion
.b_offpage_expansion
a{color:#666}.b_module_expansion
.b_expansion_wrapper
.sv_ch{fill:#666}.b_module_expansion_control.b_module_head>.b_module_expansion
.b_expansion_wrapper,.b_module_expansion_control.b_module_head>.b_module_expansion
.b_offpage_expansion
a,#b_results
.b_module_expansion_control.b_module_head>.b_module_expansion
.b_offpage_expansion
a{color:#666}.b_module_expansion_control.b_module_head>.b_module_expansion
```

```
.b_expansion_wrapper .sv_ch{fill:#666}#b_context .b_module_expansion
.b_expansion_wrapper{border-top:1px solid #ebeb}#b_context
.b_module_expansion_control.b_module_head>.b_module_expansion
.b_expansion_wrapper{border-top:0}#b_pole .b_module_expansion .b_offpage_expansion
a{color:#666}#b_pole .b_module_expansion_control.b_module_head>.b_module_expansion
.b_offpage_expansion a{color:#666}#b_context .b_module_expansion .b_offpage_expansion
a{color:#666}#b_context .b_module_expansion_control.b_module_head>.b_module_expansion
.b_expansion_wrapper,#b_context .b_module_expansion_control.b_module_head>.b_module_expansion
.b_offpage_expansion a{color:#767676}#b_context
.b_module_expansion_control.b_module_head>.b_module_expansion .b_expansion_wrapper
.sv_ch{fill:#767676}.b_btnContainer{width:100%;height:46px;border-radius:0 6px 6px
0;position:absolute;bottom:-20px}.b_CompactExpansion:active{background-color:#00526b}.b_CompactExpans
ion:hover{background-color:#106ebe;cursor:pointer}.b_CompactExpansion{background-color:#106ebe;col
or:#fff;border-radius:16px;height:30px}.b_CompactExpansion{display:inline-block;line-height:30px;text-align:
center;padding-left:16px;padding-right:16px;position:relative;left:50%;transform:translateX(-50%);bottom:-
11px;z-index:4;pointer-events:auto}html[dir="rtl"]
.b_CompactExpansion{transform:translateX(50%)}.b_CompactExpansion
.b_arrow{margin-left:7px;margin-bottom:-1.75px;display:inline-block;height:.75em}.b_algo_group
.b_CompactExpansion
.b_arrow{margin-left:3px;height:7px;margin-bottom:0;width:12px}.b_CompactExpansionBtnText{font-famil
y:inherit;font-style:normal;font-weight:400;font-size:13px;line-height:20px;color:#fff;display:inline-block}Vi
deos of Solar power Grid-connected Energy StorageWatch video34:14Grid-connected solar PV system with
Battery Energy Storage System LMS Solution45.2K viewsJun 10, 2021Watch video38:41Grid Connected
Solar PV and Battery Energy Storage System with P& O MPPT | Solar PV and Bat... LMS Solution1K views7
months agoWatch video15:14Hybrid PV-Battery Energy Storage System Integrated with Grid | MATLAB
Simulink Dr. Abdelrahman Farghly1.9K views2 months agoWatch full videoSee more.iacfm
.iacf_head{display:flex;align-items:center;gap:var(--smtc-gap-between-content-small);text-decoration-color:var(
--smtc-foreground-content-neutral-primary);box-sizing:border-box;margin-bottom:var(--smtc-gap-between-
content-x-small)}.iacfm .iacf_head span{flex:1 1
0;white-space:nowrap;text-overflow:ellipsis;overflow:hidden;color:var(--smtc-foreground-content-neutral-pri
mary);font:var(--acf-font-title-1-strong)}.iacfm .iacf_head
div{display:flex;height:22px;width:22px;justify-content:center;align-items:center;transition:background
300ms
ease-out;margin-right:-3px;border-radius:var(--mai-smtc-corner-list-card-nested-default);overflow:hidden}.iac
fm .iacf_head .iacf_chv{color:var(--smtc-foreground-content-neutral-primary)}[dir="rtl"] .iacfm .iacf_head
svg{transform:scaleX(-1)}.rel_ent_w{margin:4px 0 9px}.rel_ent_w.rel_ent_crs{margin:6px 0 16px}.b_top
.rel_ent_w{margin-top:-4px}.b_top .rel_ent_w.rel_ent_crs{margin-top:0}.b_mm_swipable
.rel_ent_w{margin:4px 0 20px}.b_rich .rel_ent_w{margin:-3px -16px
8px}.rel_ent_w.rel_ent_scr:not(.rel_ent_crs){height:50px;overflow:hidden}.rel_ent_c{white-space:nowrap;ov
```

```
erflow:hidden;padding-left:1px;height:50px}.aqptmt:not(.rel_ent_crs) .rel_ent_c{display:flex}.rel_ent_wp
.rel_ent_c{white-space:initial}.rel_ent_scr
.rel_ent_c{overflow-y:hidden;-webkit-overflow-scrolling:touch;overflow-x:auto}.rel_ent_scr:not(.rel_ent_crs)
.rel_ent_c{padding-bottom:12px}.b_mm_swipable
.rel_ent_c{padding-left:10px;margin-top:-2px;margin-bottom:4px}.b_rich
.rel_ent_c{padding-left:15px}.rel_ent_w.rel_ent_crs .slide,.rel_ent_w.rel_ent_crs
.slide:hover{width:auto;height:42px;border-radius:20px !important;box-shadow:none !important;overflow:visib
le}a.rel_ent{display:inline-block;padding:0 16px 0 12px;margin:4px 8px 4px
0;border-radius:20px;border:1px solid
#ddd;text-decoration:none;overflow:hidden;height:40px;max-width:80vw}:not(#lgVidAnsContainer)>.aqptmt
.rel_ent_c a.rel_ent{overflow:initial;display:flex}.slide a.rel_ent{margin:0;box-shadow:none}.b_slidebar
.slide .rel_ent .cico,.rel_ent .cico,.rel_ent>img{display:inline-block;vertical-align:middle;margin:2px 8px 2px
-10px;border-radius:50%;background:#f7f7f7;flex-shrink:0}.rel_ent_tw{vertical-align:middle;font-size:12px;
color:#444;line-height:16px;height:100%;float:right;display:table}.rel_ent_t{display:table-cell;vertical-align:
middle;align-content:center}.aqptmt:not(.spl2) .rel_ent_tw,.aqptmt:not(.spl2) .rel_ent_tw
.rel_ent_t{overflow:hidden;text-overflow:ellipsis;white-space:nowrap}.aqptmt:not(.spl2)
.rel_ent_tw{display:flex;overflow:hidden;text-overflow:ellipsis;align-items:center;white-space:nowrap}.rel_e
nt_w:not(.spl2) .rel_ent_t strong{display:inline-block;font-weight:normal}#b_results phead
.b_attribution{padding-bottom:8px}.iaplanner .b_moreLink{margin-top:11px}.iaplanner.iarnd
.b_moreLink{margin-top:3px}.b_ans .b_rich pserp.b_mBMargin{padding:0;border-top:0}.b_ans #vidans2
.b_rich .rel_ent_w{margin:6px 0 16px}.aqptmt a.rel_ent{border-color:#106ebe}.aqptmt:not(.spl2)
.rel_ent_tw,.aqptmt:not(.spl2) .rel_ent_tw .rel_ent_t{font-size:16px}#b_content .iacfic.mmkiaacf .iacfmit
.imgInfo{color:var(--smtc-ctrl-link-foreground-brand-rest)}#b_content .iacfic.mmkiaacf .iacfmit
a{text-decoration-color:var(--smtc-ctrl-link-foreground-brand-hover)}#b_content .iacfic.mmkiaacf .iacfmit
.imgInfo{font:var(--bing-smtc-text-global-body3)}#b_content .iacfic.mmkiaacf
.iacf_crsI[data-wptds-carousel]>div[data-wptds-carousel-scroll-container]{padding-bottom:52px}#b_content
.iacfic.mmkiaacf .iacfmit{box-sizing:initial;padding-bottom:52px}#b_content .iacfic.mmkiaacf .iacfmit
.imgInfo{text-overflow:ellipsis;display:-webkit-box;-webkit-line-clamp:2;-webkit-box-orient:vertical;align-sel
f:stretch;padding:0 var(--smtc-gap-between-content-xx-small);overflow:hidden}#b_content .iacfic.mmkiaacf
.iacfimgc{padding-bottom:var(--smtc-gap-between-content-x-small)}#b_content .acfImgAns
.salink,#b_content .acfImgAns
.iasalink{text-align:center;display:block;padding-bottom:var(--smtc-gap-between-content-medium)}#b_conte
nt .acfImgAns .salink:hover .iasabt,#b_content .acfImgAns .iasalink:hover
.iasabt{background:var(--bing-smtc-background-ctrl-outline-hover)}#b_content .acfImgAns .salink:active
.iasabt,#b_content .acfImgAns .iasalink:active
.iasabt{background:var(--bing-smtc-background-ctrl-outline-pressed)}#b_content .acfImgAns
.iasabt,#b_content .acfImgAns
.iaExp_chevron{height:initial;border-radius:var(--smtc-corner-circular);background:var(--bing-smtc-backgrou
nd-ctrl-neutral-rest);display:inline-block;position:relative;top:0;box-shadow:initial}#b_content .acfImgAns
```

```
.iasatxt{font:var(--bing-smtc-text-global-caption1-strong);color:var(--bing-smtc-foreground-content-brand-res
t);padding:var(--smtc-gap-between-content-x-small)
var(--smtc-gap-between-content-small);display:flex;gap:var(--smtc-gap-between-content-x-small);justify-cont
ent:center;align-items:center}#b_content .acfImgAns .salink::before,#b_content .acfImgAns
.iasalink::before{border-bottom:1px solid
var(--smtc-stroke-ctrl-on-neutral-rest);width:100%;display:block;content:"";top:18px;position:relative}#b_con
tent .acfImgAns .svg{vertical-align:top}#b_content .acfImgAns
.svgpath{fill:var(--bing-smtc-foreground-content-brand-rest)}#b_content .acfImgAns .iachevron,#b_content
.acfImgAns .svgicon{width:12px;height:12px;margin-left:0;position:relative;top:0}html[dir=rtl] #b_content
.acfImgAns .iachevron,html[dir=rtl] #b_content .acfImgAns .svgicon{transform:scaleX(-1)}#b_content
.acfImgAns .rel_ent_w a.rel_ent{border:1px solid var(--acf-stroke-neutral-decorative)}#b_content .acfImgAns
.iaheader .iacf_head{text-decoration-color:var(--smtc-foreground-ctrl-neutral-primary-hover)}#b_content
.acfImgAns .iaheader .iacf_head span,#b_content .acfImgAns .iaheader .iacf_head
svg{color:var(--smtc-foreground-content-neutral-primary);forced-color-adjust:auto}#b_content
.iacfic.mmkiaacf .iacf_plan .cico{border-radius:var(--smtc-corner-card-rest)}#b_content .iacfic.mmkiaacf
.iacf_plan .cico img{border-radius:var(--smtc-corner-card-rest)}#b_content
.iacfic.mmkiaacf{overflow:visible;padding:0}#b_content .iacfic.mmkiaacf
.iacf_crsl[data-wptds-carousel]{margin:0;padding-bottom:var(--smtc-gap-between-content-medium)}#b_cont
ent .iacfic.mmkiaacf .iacf_crsl[data-wptds-carousel]
[data-wptds-carousel-controls]{--wptds-carousel-control-opacity:1}#b_content .iacfic.mmkiaacf
.iacf_crsl[data-wptds-carousel]>div{padding:0}#b_content .iacfic.mmkiaacf .iacf_crsl[data-wptds-carousel]
[data-direction="end"]{margin-right:-22px}#b_content .iacfic.mmkiaacf .iacf_crsl[data-wptds-carousel]
[data-direction="end"] svg{transform:scaleX(-1)}#b_content .iacfic.mmkiaacf .iacf_crsl[data-wptds-carousel]
[data-direction="start"]{margin-left:-22px}#b_content .iacfic.mmkiaacf .iacf_crsl[data-wptds-carousel]
[data-direction="start"] svg{transform:scaleX(1)}#b_content .iacfic.mmkiaacf .iacf_crsl[data-wptds-carousel]
button{background:var(--smtc-background-card-on-primary-default-rest);box-shadow:var(--acf-elevation-3);
width:36px;border-radius:var(--smtc-corner-ctrl-lg-rest)}#b_content .iacfic.mmkiaacf
.iacf_crsl[data-wptds-carousel]
button:hover{background:var(--smtc-background-card-on-primary-default-hover)}#b_content
.iacfic.mmkiaacf .iacf_crsl[data-wptds-carousel]
button:active{background:var(--smtc-background-card-on-primary-default-pressed)}#b_content
.iacfic.mmkiaacf .iacf_crsl[data-wptds-carousel] button svg{transition:initial}#b_content .iacfic.mmkiaacf
.iacf_crsl[data-wptds-carousel] button svg
path{fill:var(--smtc-foreground-content-neutral-secondary);forced-color-adjust:auto}#b_content
.iacfic.mmkiaacf .iacfmit{position:absolute}#b_content .iacfic.mmkiaacf .iacfimgc{margin:auto}#b_content
.b_ans.b_imgansacf{padding:0!important}#b_content
.b_ans.b_top.b_imgansacf{background-color:initial!important}#b_content .acfImgAns .iaheader
.iacf_head{gap:0;padding:var(--smtc-gap-between-content-medium)
0;display:flex;align-items:center;box-sizing:border-box}#b_content .acfImgAns .iaheader
```

```
.iacf_head:hover{text-decoration:none}#b_content .acfImgAns .iaheader .iacf_head:hover
span{text-decoration:underline}#b_content .acfImgAns .iaheader .iacf_head:hover
.iacf_chv{background:initial}#b_content .acfImgAns .iaheader .iacf_head
div{display:flex;align-items:center;transition:background 300ms
ease-out;margin-right:-3px;border-radius:var(--smtc-corner-ctrl-rest);overflow:hidden;color:var(--bing-smtc-f
oreground-content-neutral-secondary-alt)}#b_content .acfImgAns .iaheader .iacf_head
span{width:initial;flex:none;font:var(--bing-smtc-text-global-subtitle1-strong);padding-inline-start:var(--mai-s
mtc-padding-card-default);max-width:90%;text-overflow:ellipsis;white-space:nowrap;overflow:hidden}#b_co
ntent .acfImgAns .iaheader .iacf_head .iacf_chv{width:22px;justify-content:center;height:22px}#b_content
.acfImgAns .rel_ent_w{margin-top:0}#b_content .acfImgAns .rel_ent_w .b_slideexp{margin:0}#b_content
.acfImgAns .rel_ent_w .btn.rounded{top:initial;margin-top:1px}#b_content .acfImgAns .rel_ent_w
.btn.next{right:-14px}#b_content .acfImgAns .rel_ent_w
.cr>div{width:36px;height:38px;border-radius:var(--smtc-corner-ctrl-lg-rest);background:var(--bing-smtc-bac
kground-container);box-shadow:var(--acf-elevation-3);border:initial}#b_content .acfImgAns .rel_ent_w
.cr>div:after{margin-inline-start:2px;top:0}#b_content .acfImgAns .rel_ent_w
.b_viewport{padding-top:0;margin-left:0;padding-left:0}#b_content .acfImgAns .rel_ent_w .b_viewport
.slide{height:38px;margin-left:0;margin-inline-end:var(--smtc-gap-between-content-x-small)}#b_content
.acfImgAns .rel_ent_w
a.rel_ent{border-radius:var(--smtc-corner-circular);background:var(--smtc-background-card-on-primary-defau
lt-rest);padding-left:0;height:38px}#b_content .acfImgAns .rel_ent_w
a.rel_ent:hover{background:var(--smtc-background-card-on-primary-default-hover)}#b_content .acfImgAns
.rel_ent_w a.rel_ent:active{background:var(--smtc-background-card-on-primary-default-pressed)}#b_content
.acfImgAns .rel_ent_w .cico{margin:var(--smtc-gap-between-content-xx-small)
var(--smtc-gap-between-content-x-small) var(--smtc-gap-between-content-xx-small)
var(--smtc-gap-between-content-xx-small)}#b_content .acfImgAns .rel_ent_w
.rel_ent_tw{font:var(--bing-smtc-text-global-caption1-strong)}#b_content .acfImgAns .rel_ent_w
.rel_ent_c{padding-left:0}#b_content .acfImgAns .rel_ent_w
.b_slidebar{padding-inline-start:var(--mai-smtc-padding-card-default)}#b_content .acfImgAns .rel_ent_w
.rel_ent_c
.rel_ent:first-child{margin-inline-start:var(--mai-smtc-padding-card-default);align-items:center}#b_content
.acfImgAns .rel_ent_w .rel_ent_t{max-width:250px}html[dir=rtl] #b_content .acfImgAns .iaheader .iacf_head
svg{transform:scaleX(-1)}html[dir=rtl] #b_content .acfImgAns .iacf_crsl[data-wptds-carousel]
[data-direction="end"]{transform:scaleX(-1)}html[dir=rtl] #b_content .acfImgAns
.iacf_crsl[data-wptds-carousel] [data-direction="start"]{transform:scaleX(-1)}.iacfm .iacfmit a:focus
.isp_imgcont img,.iacfm .iacfmit a:focus .iacfimgc img,.iacfm .iacfmit a:focus .iacf_smol{outline:3px dotted
#1aebff;outline-offset:-5px}.iacfm .iacfmit .cico{position:relative}.iacfm .iacfmit
.cico::after{content:"";position:absolute;left:0;top:0;width:100%;height:100%;background:rgba(0,0,0,.03)}.gs
_card .iacfmit img,.b_wpt_container .iacfmit img,.b_acf_card .iacfmit img{transition:transform .3s
ease-out}.gs_card .iacfmit:hover .iacfimgc img,.b_wpt_container .iacfmit:hover .iacfimgc img,.b_acf_card
```

```
.iacfmit:hover .iacfimgc
img{transform:scale(1.1)}.iacfc{position:relative;height:100%;width:100%;background:#fff;overflow:hidden
;border-radius:inherit}.iacf_plan{position:relative}.iacfmit
.mimg{width:100%;height:100%;position:relative}.iacfc .iacfmit{position:absolute}.iacfc .iacfmit
.cico{border-radius:0}.iacfca{padding:var(--mai-smtc-padding-card-default);box-sizing:border-box;overflow:
hidden;border-radius:var(--smtc-corner-card-rest)}.iacfca .iacf_crsl
.iacfmit{overflow:hidden;position:relative}.iacfca .iacf_crsl .iacfmit
.cico{overflow:hidden;border-radius:var(--mai-smtc-corner-list-card-nested-default)}.iacfca .iacf_crsl .iacfmit
.cico img{border-radius:inherit;transition:transform 300ms ease-out}.iacfca .iacf_crsl .iacfmit:hover .cico
img{transform:scale(1.1)}.iacfca .iacfmit a:focus,.iacfca .iacfmit a:focus img{outline:0}.iacfca .iacfmit
a:focus .cico::after{border-radius:inherit;box-shadow:inset 0 0 0 3px
var(--bing-smtc-background-card-on-primary-alt-rest);outline:2px solid
var(--smtc-foreground-content-neutral-secondary);outline-offset:-2px}.iacfca
[data-wptds-carousel][data-default][data-variant="Normal"]{margin:0
calc(-1*var(--mai-smtc-padding-card-default));height:auto}.iacfca
[data-wptds-carousel][data-default][data-variant="Normal"] [data-wptds-carousel-scroll-container]{padding:0
var(--mai-smtc-padding-card-default)}.iacfca [data-wptds-carousel][data-default][data-variant="Normal"]
[data-wptds-carousel-scroll-container] ol{width:fit-content;align-items:center}.iacfca
[data-wptds-carousel][data-default]
[data-wptds-carousel-control][data-direction="end"]{margin-right:24px}.iacfca
[data-wptds-carousel][data-default]
[data-wptds-carousel-control][data-direction="start"]{margin-left:24px}.iacfca
.iacf_pag{position:absolute;bottom:8px;left:50%;transform:translate(-50%,0)}.cards.large
.iacfca{height:200px}[dir="rtl"] .iacfca .iacf_pag{transform:translate(50%,0)}.iacfm.iacfca
.iacf_crsl[data-wptds-carousel]
[data-wptds-carousel-control]{background:var(--bing-smtc-background-ctrl-neutral-rest);border:0;height:56px
;width:16px;transition:width .3s;background
.3s;color:var(--smtc-foreground-ctrl-neutral-primary-hover)}.iacfm.iacfca .iacf_crsl[data-wptds-carousel]
[data-wptds-carousel-control] svg{transition:transform .3s}.iacfm.iacfca .iacf_crsl[data-wptds-carousel]
[data-wptds-carousel-control]:hover{width:24px;background:var(--smtc-background-ctrl-neutral-hover)}.iacf
m.iacfca .iacf_crsl[data-wptds-carousel] [data-wptds-carousel-control] path{fill:currentColor}.iacfm.iacfca
.iacf_crsl[data-wptds-carousel] ol [data-direction="start"]{border-radius:0 8px 8px
0;margin-left:16px}.iacfm.iacfca .iacf_crsl[data-wptds-carousel] ol [data-direction="start"]
svg{transform:scale(.7)}.iacfm.iacfca .iacf_crsl[data-wptds-carousel] ol [data-direction="start"]:hover
svg{transform:scale(1)}.iacfm.iacfca .iacf_crsl[data-wptds-carousel] ol
[data-direction="end"]{border-radius:8px 0 0 8px;margin-right:16px}.iacfm.iacfca
.iacf_crsl[data-wptds-carousel] ol [data-direction="end"] svg{transform:scale(-.7)}.iacfm.iacfca
.iacf_crsl[data-wptds-carousel] ol [data-direction="end"]:hover svg{transform:scale(-1)}.iacfm.iacfca.iacf_fb
.iacf_crsl[data-wptds-carousel] [data-wptds-carousel-control],.iacfm.iacfca.iacf_ss
```

```
.iacf_crsl[data-wptds-carousel]
[data-wptds-carousel-control]{background:var(--mai-smtc-background-ctrl-on-image-rest);color:var(--mai-smtc-foreground-ctrl-on-image-rest)}.iacfm.iacfca.iacf_fb .iacf_crsl[data-wptds-carousel]
[data-wptds-carousel-control] path,.iacfm.iacfca.iacf_ss .iacf_crsl[data-wptds-carousel]
[data-wptds-carousel-control] path{fill:currentColor}.iacfca .iacf_colg_crsl
[data-wptds-carousel-list]{width:fit-content}.iacfca .iacf_colg_crsl .iacfmit{position:absolute}.iacfca.iacf_colg_crsl
.cico{border-radius:0}.iacfca:not(.iacfh):has(>.iacf_colg_crsl){height:100%;width:100%;padding:0;overflow:hidden;border-radius:inherit}.iacfca:not(.iacfh):has(>.iacf_colg_crsl)
.iacfmit{border-radius:0}.iacfca:not(.iacfh):has(>.iacf_colg_crsl) [data-wptds-carousel][data-default]
[data-wptds-carousel-controls]{inline-size:calc(100% + var(--wptds-carousel-control-size) - var(--mai-smtc-padding-card-default)*2);transform:translateX(calc(0rem + var(--mai-smtc-padding-card-default) - (var(--wptds-carousel-control-size)/2))) translateY(-50%)}[data-wptds-carousel][data-default],[data-wptds-carousel][data-default]::before,[data-wptds-carousel][data-default]::after,[data-wptds-carousel][data-default] *,[data-wptds-carousel][data-default] *::before,[data-wptds-carousel][data-default] *::after{box-sizing:border-box;margin:0;padding:0}[data-wptds-carousel][data-default][hidden],[data-wptds-carousel][data-default][data-visually-hidden],[data-wptds-carousel][data-default][data-visually-hidden]{block-size:.0625rem;border:0;clip:rect(0 0 0 0);inline-size:.0625rem;margin:-.0625rem;overflow:hidden;padding:0;position:absolute}[data-wptds-carousel][data-default]{--wptds-carousel-control-bg-color:#fff;--wptds-carousel-control-border-color:#ddd;--wptds-carousel-control-box-shadow:0rem .125rem .1875rem rgba(0,0,0,.1);--wptds-carousel-control-fg-color:#767676;--wptds-carousel-control-size:2rem;display:block;position:relative;block-size:100%}[data-wptds-carousel][data-default]
[data-wptds-carousel-scroll-container]{overflow-x:auto;overflow-y:clip;scroll-behavior:smooth;block-size:100%;-ms-overflow-style:none;scrollbar-width:none}[data-wptds-carousel][data-default]
[data-wptds-carousel-scroll-container]::-webkit-scrollbar{display:none}[data-wptds-carousel][data-default]
[data-wptds-carousel-scroll-container]:focus-visible{outline-color:Highlight;outline-color:-webkit-focus-ring-color;outline-offset:.0625rem;outline-style:auto;outline-width:.0625rem}[data-wptds-carousel][data-default]
[data-wptds-carousel-list]{display:flex;gap:.5rem;list-style:none;block-size:100%}[data-wptds-carousel][data-default]
[data-wptds-carousel-list]>*[flex-grow:0;flex-shrink:0][data-wptds-carousel][data-default]
[data-wptds-carousel-list]>:not([data-wptds-carousel-item]){display:none}[data-wptds-carousel][data-default]
[data-wptds-carousel-item]{block-size:100%}[data-wptds-carousel][data-default]
[data-wptds-carousel-item]>*[block-size:100%][data-wptds-carousel][data-default]
[data-wptds-carousel-item]>img{display:block;inline-size:auto}[data-wptds-carousel][data-default]
[data-wptds-carousel-controls]{list-style:none;position:absolute;inline-size:calc(100% + var(--wptds-carousel-control-size));inset-block-start:50%;transform:translateX(calc(0rem - (var(--wptds-carousel-control-size)/2)))
```

```
translateY(-50%);display:flex;align-items:center;justify-content:space-between;pointer-events:none}[data-wp
ds-carousel][data-default]
[data-wpds-carousel-controls]>{*flex-grow:0;flex-shrink:0}[data-wpds-carousel][data-default]
[data-wpds-carousel-control]{cursor:pointer;inline-size:var(--wpds-carousel-control-size);aspect-ratio:1;displ
ay:grid;place-content:center;border-radius:50%;background-color:var(--wpds-carousel-control-bg-color);bord
er:.0625rem solid
var(--wpds-carousel-control-border-color);box-shadow:var(--wpds-carousel-control-box-shadow);color:var(-
-wpds-carousel-control-fg-color);opacity:var(--wpds-carousel-control-opacity);pointer-events:all}[data-wpds
-carousel][data-default]
[data-wpds-carousel-control]:active{--wpds-carousel-control-bg-color:#fff;--wpds-carousel-control-border-c
olor:#ddd;--wpds-carousel-control-box-shadow:0rem .125rem .1875rem
rgba(0,0,0,.1);--wpds-carousel-control-fg-color:#767676}[data-wpds-carousel][data-default]
[data-wpds-carousel-control]:focus-visible{outline-color:Highlight;outline-color:-webkit-focus-ring-color;out
line-offset:.0625rem;outline-style:auto;outline-width:.0625rem}[data-wpds-carousel][data-default]
[data-wpds-carousel-control] *{pointer-events:none}[data-wpds-carousel][data-default]
[data-wpds-carousel-control]>svg{display:block}[data-wpds-carousel][data-default]
[data-wpds-carousel-control][data-direction="start"]>svg{transform:scaleX(1)}[data-wpds-carousel][data-de
fault]
[data-wpds-carousel-control][data-direction="end"]>svg{transform:scaleX(-1)}[data-wpds-carousel][data-de
fault]
[data-wpds-carousel-control][aria-disabled="true"]{visibility:hidden;cursor:not-allowed}[data-wpds-carousel
][data-default]
[data-wpds-carousel-announce]{block-size:.0625rem;border:0;clip:rect(0 0 0 0);inline-size:.0625rem;margin:-.0625rem;overflow:hidden;padding:0;position:absolute}[data-wpds-carousel]
[data-default][data-variant="Normal"],[data-wpds-carousel][data-default][data-variant="FullWidth"]{--wpds
-carousel-control-opacity:0}[data-wpds-carousel][data-default][data-variant="Normal"]:has([data-wpds-caro
usel-scroll-container]:focus-visible),[data-wpds-carousel][data-default][data-variant="Normal"]:has([data-wp
ds-carousel-control]:focus-visible),[data-wpds-carousel][data-default][data-variant="FullWidth"]:has([data-w
pds-carousel-scroll-container]:focus-visible),[data-wpds-carousel][data-default][data-variant="FullWidth"]:h
as([data-wpds-carousel-control]:focus-visible){--wpds-carousel-control-opacity:1}[data-wpds-carousel][dat
a-default][data-variant="Normal"]
[data-snap] [data-wpds-carousel-scroll-container]{scroll-snap-type:x
proximity}[data-wpds-carousel][data-default][data-variant="Normal"]
[data-snap]
[data-wpds-carousel-item]{scroll-snap-align:center;scroll-snap-stop:always}[data-wpds-carousel][data-defau
lt][data-variant="Normal"]
[data-snap]
[data-wpds-carousel-item]:first-of-type{scroll-snap-align:start}[data-wpds-carousel][data-default][data-vari
ant="Normal"]
[data-snap]
[data-wpds-carousel-item]:last-of-type{scroll-snap-align:end}[data-wpds-carousel][data-default][data-variant
="FullWidth"]
[data-wpds-carousel-scroll-container]{scroll-snap-type:x
mandatory}[data-wpds-carousel][data-default][data-variant="FullWidth"]
[data-wpds-carousel-item]{inline-size:100%;scroll-snap-align:center;scroll-snap-stop:always}[data-wpds-car
```

```
ousel][data-default][data-variant="FullWidth"]
[data-wptds-carousel-item]:first-of-type{scroll-snap-align:start}[data-wptds-carousel][data-default][data-variant="FullWidth"]
[data-wptds-carousel-item]:last-of-type{scroll-snap-align:end}[data-wptds-carousel][data-default][data-variant="FullWidth"]
[data-wptds-carousel-item]>{*{inline-size:100%}[data-wptds-carousel][data-default][data-bleed-inline]
[data-wptds-carousel-controls]{--control-side-gap:.25rem;inline-size:calc(100% - (var(--control-side-gap)*2));transform:translateX(calc(0rem + var(--control-side-gap))) translateY(-50%)}[data-wptds-carousel][data-desktop]
[data-wptds-carousel-control]:hover:not([aria-disabled="true"]):not(:active){--wptds-carousel-control-bg-color:#fff;--wptds-carousel-control-border-color:#ddd;--wptds-carousel-control-box-shadow:0rem .125rem .3125rem rgba(0,0,0,.14);--wptds-carousel-control-fg-color:#111}[data-wptds-carousel][data-desktop][data-variant="Normal"]:has([data-wptds-carousel-scroll-container]:hover),[data-wptds-carousel][data-desktop][data-variant="Normal"]:has([data-wptds-carousel-control]:hover),[data-wptds-carousel][data-desktop][data-variant="FullWidth"]:has([data-wptds-carousel-scroll-container]:hover),[data-wptds-carousel][data-desktop][data-variant="FullWidth"]:has([data-wptds-carousel-control]:hover){--wptds-carousel-control-opacity:1}[dir="rtl"]
[data-wptds-carousel][data-default][data-wptds-carousel-controls]{transform:translateX(calc(0rem + (var(--wptds-carousel-control-size)/2))) translateY(-50%)}[dir="rtl"] [data-wptds-carousel][data-default][data-wptds-carousel-control][data-direction="start"]>svg{transform:scaleX(-1)}[dir="rtl"]
[data-wptds-carousel][data-default]
[data-wptds-carousel-control][data-direction="end"]>svg{transform:scaleX(1)}[dir="rtl"]
[data-wptds-carousel][data-default][data-bleed-inline]
[data-wptds-carousel-controls]{transform:translateX(calc(0rem - var(--control-side-gap))) translateY(-50%)} .b_dark [data-wptds-carousel][data-default] .b_drk
[data-wptds-carousel][data-default]{--wptds-carousel-control-bg-color:#484644;--wptds-carousel-control-border-color:#545250;--wptds-carousel-control-box-shadow:0rem .125rem .1875rem rgba(0,0,0,.1);--wptds-carousel-control-fg-color:#d2d0ce} .b_dark [data-wptds-carousel][data-default]
[data-wptds-carousel-control]:active .b_drk [data-wptds-carousel][data-default]
[data-wptds-carousel-control]:active{--wptds-carousel-control-bg-color:#484644;--wptds-carousel-control-border-color:#545250;--wptds-carousel-control-box-shadow:0rem .125rem .1875rem rgba(0,0,0,.1);--wptds-carousel-control-fg-color:#d2d0ce} .b_dark [data-wptds-carousel][data-desktop]
[data-wptds-carousel-control]:hover:not([aria-disabled="true"]):not(:active) .b_drk
[data-wptds-carousel][data-desktop]
[data-wptds-carousel-control]:hover:not([aria-disabled="true"]):not(:active){--wptds-carousel-control-bg-color:#605e5c;--wptds-carousel-control-border-color:#545250;--wptds-carousel-control-box-shadow:0rem .125rem .3125rem rgba(0,0,0,.14);--wptds-carousel-control-fg-color:#faf9f8} .gs_card .iacfic .iacfmit .iacfimgc .gs_card .iacfic .iacfmit .cico .b_wpt_container .iacfic .iacfmit .iacfimgc .b_wpt_container .iacfic .iacfmit .cico{width:100%!important;height:100%!important;border-radius:0} .gs_card .iacfic .iacfmit .iacfstc
```



# Solar power grid-connected energy storage

Source: <https://www.afasystem.info.pl/Tue-07-Jun-2016-3107.html>

Website: <https://www.afasystem.info.pl>

img,gs\_card .iacfic .iacfmit .iacfimgc img,.b\_wpt\_container .iacfic .iacfmit.iacfstc img,.b\_wpt\_container .iacfic .iacfmit .iacfimgc img{width:100%;height:100%;object-fit:cover}#slideexp2\_B8C762 .slide { margin-right: 8px; }#slideexp2\_B8C762 .b\_slidebar .slide { border-radius: 6px; }#slideexp2\_B8C762 .slide:last-child { margin-right: 1px; }#slideexp2\_B8C762c { margin: -4px; } #slideexp2\_B8C762c .b\_viewport { padding: 4px 1px 4px 1px; margin: 0 3px; } #slideexp2\_B8C762c .b\_slidebar .slide { box-shadow: 0 0 0 1px rgba(0, 0, 0, 0.05); -webkit-box-shadow: 0 0 0 1px rgba(0, 0, 0, 0.05); } #slideexp2\_B8C762c .b\_slidebar .slide.see\_more { box-shadow: 0 0 0 0px rgba(0, 0, 0, 0.00); -webkit-box-shadow: 0 0 0 0px rgba(0, 0, 0, 0.00); } #slideexp2\_B8C762c .b\_slidebar .slide.see\_more .carousel\_seemore { border: 0px; }#slideexp2\_B8C762c .b\_slidebar .slide.see\_more:hover { box-shadow: 0 0 0 0px rgba(0, 0, 0, 0.00); -webkit-box-shadow: 0 0 0 0px rgba(0, 0, 0, 0.00); }Images of Solar Power grid-connected Energy StorageSolar Power Energy StorageSolar And Energy StorageSolar Energy Storage SystemSolar Energy StoragePhotovoltaic Energy Storage SystemSolar Energy Storage ImagesSolar Energy Conversion And StorageSolar Pv Energy Storage SystemPhotovoltaic Energy StorageSmart Grid Solar | Providing Ancillary Services with Utility PV and StorageUltimate Guide to Solar Energy Storage SystemsThe components of any grid-connected solar power system ...How the Grid-Tied Photovoltaic System Works with Hybrid Inverter ...Will smart grids work with solar - and save you money?W&#228;rtsil&#228;"s DC-coupled solar-plus-storage hybrid enables Georgia Power ...Three diagrams with photovoltaics and energy storage - Hybrid, Off Grid ...Residential Solar Power System Grid On Grid Residential Solar PVGrid Connected Solar Power Plants MW Scale, Solar Plants, Solar Project ...See all.pa\_item .pa\_img.white\_bg,.pa\_hover .pa\_hover\_img.white\_bg{background-color:#f5f5f5}@media(forced-colors:none){.pa\_item .pa\_img.white\_bg img,.pa\_hover .pa\_hover\_img.white\_bg img{mix-blend-mode:multiply}}#b\_content .pa\_carousel\_mlo .b\_slidebar .slide.see\_more{width:85px!important;margin-right:0!important}#b\_content .pa\_carousel\_mlo .see\_more .carousel\_seemore img.seeAll\_chev.rms\_img{opacity:0;padding-bottom:var(--smtc-gap-between-content-xx-small)}#b\_content .pa\_carousel\_mlo .see\_more .carousel\_seemore a.b\_moreLink{position:relative;text-decoration-color:var(--bing-smtc-foreground-content-brand-rest)}#b\_content .pa\_carousel\_mlo .see\_more .carousel\_seemore a.b\_moreLink::before{content:"";position:absolute;width:48px;height:48px;top:var(--smtc-gap-between-content-medium);left:50%;-webkit-transform:translate(-50%,0);-moz-transform:translate(-50%,0);-ms-transform:translate(-50%,0);-o-transform:translate(-50%,0);transform:translate(-50%,0);background-color:var(--bing-smtc-background-card-on-primary-alt-pressed);border-radius:10px;opacity:0;-webkit-transition:opacity .1s ease;-moz-transition:opacity .1s ease;-ms-transition:opacity .1s ease;-o-transition:opacity .1s ease;transition:opacity .1s ease}#b\_content .pa\_carousel\_mlo .see\_more .carousel\_seemore a.b\_moreLink:hover::before,#b\_content .pa\_carousel\_mlo .see\_more .carousel\_seemore a.b\_moreLink:focus::before,#b\_content .pa\_carousel\_mlo .see\_more .carousel\_seemore a.b\_moreLink:active::before{opacity:1}#b\_content .pa\_carousel\_mlo .see\_more .carousel\_seemore a.b\_moreLink::after{content:"";position:absolute;width:13px;height:13px;bottom:var(--smtc-padding-content-xx-large);left:50%;border-style:solid;border-width:3px 3px 0 0;border-color:var(--bing-smtc-foreground-content-brand-rest);-webkit-transform:translate(-75%,-50%)

```
rotate(45deg);-moz-transform:translate(-75%,-50%) rotate(45deg);-ms-transform:translate(-75%,-50%)
rotate(45deg);-o-transform:translate(-75%,-50%) rotate(45deg);transform:translate(-75%,-50%)
rotate(45deg);border-radius:2px}#b_content .pa_carousel_mlo .see_more .carousel_seemore a.b_moreLink
.seeAll_txt{color:var(--bing-smtc-foreground-content-brand-rest);font:var(--bing-smtc-text-global-body3-stro
ng)}.pa_carousel .b_slideexp{margin-bottom:0}.pa_carousel .b_slideexp
.btn{z-index:8}.pa_carousel_mlo{margin:0
calc(-1*var(--mai-smtc-padding-card-default));padding-bottom:var(--smtc-gap-between-content-xx-small)}.b_
adBottom .pa_carousel_mlo{margin:var(--mai-smtc-padding-card-default) 0 0 0!important}.narrpole
.pa_carousel_ml{padding-right:20px}.pa_carousel_mlo.expanded
.pa_carousel_ml{padding-right:var(--smtc-gap-between-content-xx-large)}.pa_carousel_ml
.slide{border-collapse:separate}.pa_carousel_ml .slide.anim{visibility:hidden;animation:slideInFromLeft .05s
cubic-bezier(.3,.5,.1,1) .3s 1 normal forwards}@-webkit-keyframes
slideInFromLeft{0%{visibility:visible;transform:translateX(100%)}100%{visibility:visible;transform:translat
eX(0)}}@keyframes
slideInFromLeft{0%{visibility:visible;transform:translateX(100%)}100%{visibility:visible;transform:translat
eX(0)}}.pa_carousel_ml .slide:focus-visible{text-decoration:underline}li
.pa_mlo{padding-bottom:0}#b_content ol#b_results li.b_ad,#b_content ol#b_topw.b_results_eml
li.b_ad{border-bottom:0}.b_adPATitle{text-overflow:ellipsis;overflow:hidden;white-space:nowrap;padding-ri
ght:var(--smtc-gap-between-content-medium);height:26px;font:var(--bing-smtc-text-global-subtitle1-strong);c
olor:var(--smtc-foreground-content-neutral-primary)!important;padding-bottom:var(--smtc-padding-ctrl-sm-te
xt-bottom)}.b_adPATitleBlock{padding-bottom:var(--smtc-gap-between-content-small)}.b_adPATitleBlock
.b_floatR{margin-left:var(--mai-smtc-padding-card-default)}.b_adPATitle
a:focus-visible{margin-left:var(--smtc-padding-ctrl-text-side);text-decoration:underline}.b_adPATitle
a{font:var(--bing-smtc-text-global-subtitle1-strong)!important;color:var(--smtc-foreground-content-neutral-pri
mary)!important;vertical-align:text-bottom}.pa_carousel_ml
.b_adPATitleBlock{padding-left:var(--mai-smtc-padding-card-default)}.b_adPATitle_chevron{display:inline-
flex;padding:var(--smtc-gap-inside-ctrl-to-secondary-icon)}.b_adPATitleBlock
.b_adSlug{margin-right:var(--bing-ads-smtc-url-icon-padding-left);padding:0
var(--smtc-padding-ctrl-text-side);border:1px solid
var(--bing-ads-smtc-ad-slug-stroke);font:var(--bing-smtc-text-global-caption2);color:var(--bing-ads-smtc-desk
top-foreground-ad-slug-default);border-radius:var(--bing-ads-smtc-ad-slug-corner)}.b_adChoice{position:rela
tive;width:12px;height:12px;text-indent:0;overflow:hidden;direction:ltr;transform:none;float:right}.b_adChoic
eInline{display:inline-block}.b_adChoice::after{transform-origin:-320px
0;transform:scale(.5);position:relative;display:inline-block}.b_adSlugRow
.b_adChoice{float:none;vertical-align:-1px;display:inline-block}.pa_sbo+a
.b_adChoice{margin-top:8px}.b_adPATitleBlock bubble_lite bubble_item,.b_adSlugRow bubble_lite
bubble_item,.b_spa_adblock bubble_lite bubble_item,.b_magazine bubble_lite
bubble_item,.ra_car_container bubble_lite
bubble_item,.b_adinfo{display:inline-block!important}.b_adinfo{cursor:pointer;vertical-align:middle;line-hei
```

ght:0}.b\_adChoice::after{content:url(/rp/EX\_mgILPdYtFnI-37m1pZn5YKII.png)}.emb\_ppa  
.listad{position:relative}.emb\_ppa .b\_adinfo bubble\_item{height:12px}.emb\_ppa lcard .lc\_content  
.b\_factrow .b\_slgw{position:absolute;top:6px;left:8px;display:flex;align-items:center;border:1px solid  
#ecec;#ecec;border-radius:6px;background-color:#fff;justify-content:center;height:20px;width:71px}div.b\_adSlug  
, lcard .lc\_content .b\_factrow div.b\_embPPASlug.b\_adSlug,#IMapContainer .b\_aswta .vertcard .lc\_content  
div.b\_factrow div.b\_adSlug,div.gs\_VA\_slgw .b\_adSlug.b\_opttxt.b\_divdef,genserp\_PA\_container  
.genserp\_PA\_title div.genserp\_PA\_adslug  
span.genserp\_adSlug,.gs\_embedded\_label\_container,.embedded\_msan\_ad\_slug{border:0;margin-right:0}#b\_c  
ontent .pa\_carousel\_mlo .pa\_item.pa\_vCard .pa\_title,#b\_content .pa\_carousel\_mlo .pa\_item.pa\_vCard  
.pa\_caption,#b\_content .pa\_carousel\_mlo .pa\_item.pa\_vCard .b\_finalText,#b\_content .pa\_carousel  
.pa\_item.pa\_vCard .pa\_title,#b\_content .pa\_carousel .pa\_item.pa\_vCard .pa\_caption,#b\_content .pa\_carousel  
.pa\_item.pa\_vCard .b\_finalText,#b\_content .pa\_grid .pa\_item.pa\_vCard .pa\_title,#b\_content .pa\_grid  
.pa\_item.pa\_vCard .pa\_caption,#b\_content .pa\_grid .pa\_item.pa\_vCard .b\_finalText{padding:0  
var(--smtc-padding-ctrl-horizontal-default)}#b\_content .pa\_carousel\_mlo .pa\_item.pa\_vCard .cico,#b\_content  
.pa\_carousel .pa\_item.pa\_vCard .cico,#b\_content .pa\_grid .pa\_item.pa\_vCard  
.cico{margin-bottom:var(--smtc-gap-between-content-small)}#b\_content .pa\_carousel\_mlo  
.pa\_item.pa\_vCard .pa\_title,#b\_content .pa\_carousel .pa\_item.pa\_vCard .pa\_title,#b\_content .pa\_grid  
.pa\_item.pa\_vCard  
.pa\_title{font:var(--bing-smtc-text-global-body3);color:var(--smtc-ctrl-link-foreground-brand-rest)}#b\_content  
t .pa\_carousel\_mlo .pa\_item.pa\_vCard .pa\_caption,#b\_content .pa\_carousel .pa\_item.pa\_vCard  
.pa\_caption,#b\_content .pa\_grid .pa\_item.pa\_vCard  
.pa\_caption{margin-top:var(--smtc-gap-between-content-x-small);padding-bottom:var(--smtc-gap-between-co  
ntent-x-small);font:var(--bing-smtc-text-global-caption1)!important}#b\_content .pa\_carousel\_mlo  
.pa\_item.pa\_vCard .pa\_caption .pa\_price,#b\_content .pa\_carousel .pa\_item.pa\_vCard .pa\_caption  
.pa\_price,#b\_content .pa\_grid .pa\_item.pa\_vCard .pa\_caption  
.pa\_price{margin-bottom:var(--smtc-gap-between-content-xx-small)}#b\_content .pa\_carousel\_mlo  
.pa\_item.pa\_vCard .pa\_caption .pa\_price .prc\_clr\_grn,#b\_content .pa\_carousel .pa\_item.pa\_vCard .pa\_caption  
.pa\_price .prc\_clr\_grn,#b\_content .pa\_grid .pa\_item.pa\_vCard .pa\_caption .pa\_price  
.prc\_clr\_grn{color:var(--smtc-status-success-tint-foreground)}#b\_content .pa\_carousel\_mlo  
.pa\_item.pa\_vCard .pa\_caption .pa\_price strong,#b\_content .pa\_carousel .pa\_item.pa\_vCard .pa\_caption  
.pa\_price strong,#b\_content .pa\_grid .pa\_item.pa\_vCard .pa\_caption .pa\_price  
strong{color:var(--smtc-foreground-content-neutral-primary)}#b\_content .pa\_carousel\_mlo  
.pa\_item.pa\_vCard .pa\_caption .pa\_price .original\_price,#b\_content .pa\_carousel .pa\_item.pa\_vCard  
.pa\_caption .pa\_price .original\_price,#b\_content .pa\_grid .pa\_item.pa\_vCard .pa\_caption .pa\_price  
.original\_price{font:var(--bing-smtc-text-global-caption1);padding-left:var(--smtc-gap-between-content-x-sma  
ll)}#b\_content .pa\_carousel\_mlo .pa\_item.pa\_vCard .pa\_caption .pa\_installmentDesc,#b\_content  
.pa\_carousel\_mlo .pa\_item.pa\_vCard .pa\_caption .pa\_unitprice,#b\_content .pa\_carousel\_mlo  
.pa\_item.pa\_vCard .pa\_caption .vertical\_converted\_price,#b\_content .pa\_carousel\_mlo .pa\_item.pa\_vCard  
.pa\_caption .pa\_shippingcost,#b\_content .pa\_carousel .pa\_item.pa\_vCard .pa\_caption

```
.pa_installmentDesc,#b_content .pa_carousel .pa_item.pa_vCard .pa_caption .pa_unitprice,#b_content
.pa_carousel .pa_item.pa_vCard .pa_caption .vertical_converted_price,#b_content .pa_carousel
.pa_item.pa_vCard .pa_caption .pa_shippingcost,#b_content .pa_grid .pa_item.pa_vCard .pa_caption
.pa_installmentDesc,#b_content .pa_grid .pa_item.pa_vCard .pa_caption .pa_unitprice,#b_content .pa_grid
.pa_item.pa_vCard .pa_caption .vertical_converted_price,#b_content .pa_grid .pa_item.pa_vCard .pa_caption
.pa_shippingcost{font:var(--bing-smtc-text-global-caption1);margin-bottom:var(--smtc-gap-between-content-
xx-small);color:var(--bing-smtc-foreground-content-neutral-secondary-alt)}#b_content .pa_carousel_mlo
.pa_item.pa_vCard .pa_caption .b_attribution,#b_content .pa_carousel .pa_item.pa_vCard .pa_caption
.b_attribution,#b_content .pa_grid .pa_item.pa_vCard .pa_caption
.b_attribution{margin-bottom:var(--smtc-gap-between-content-xx-small);color:var(--bing-smtc-foreground-co
ntent-neutral-secondary-alt);border-bottom:0;font:var(--bing-smtc-text-global-caption1)}#b_content
.pa_carousel_mlo .pa_item.pa_vCard .pa_caption .b_attribution cite,#b_content .pa_carousel
.pa_item.pa_vCard .pa_caption .b_attribution cite,#b_content .pa_grid .pa_item.pa_vCard .pa_caption
.b_attribution
cite{font:var(--bing-smtc-text-global-caption1);color:var(--bing-smtc-foreground-content-neutral-secondary-al
t);opacity:unset}#b_content .pa_carousel_mlo .pa_item.pa_vCard .pa_caption .b_secondaryText,#b_content
.pa_carousel .pa_item.pa_vCard .pa_caption .b_secondaryText,#b_content .pa_grid .pa_item.pa_vCard
.pa_caption
.b_secondaryText{font:var(--bing-smtc-text-global-caption1);color:var(--bing-smtc-foreground-content-neutra
l-secondary-alt)}#b_content .pa_carousel_mlo .pa_item.pa_vCard .pa_caption .b_secondaryText
.pa_rebateText,#b_content .pa_carousel .pa_item.pa_vCard .pa_caption .b_secondaryText
.pa_rebateText,#b_content .pa_grid .pa_item.pa_vCard .pa_caption .b_secondaryText
.pa_rebateText{font:var(--bing-smtc-text-global-caption1);color:var(--bing-smtc-foreground-content-neutral-s
econdary-alt)}#b_content .pa_carousel_mlo .pa_item.pa_vCard .pa_caption .b_secondaryText .pa_promo
a,#b_content .pa_carousel .pa_item.pa_vCard .pa_caption .b_secondaryText .pa_promo a,#b_content .pa_grid
.pa_item.pa_vCard .pa_caption .b_secondaryText .pa_promo
a{color:var(--smtc-ctrl-link-foreground-brand-rest)}#b_content .pa_carousel_mlo .pa_item.pa_vCard
.pa_caption .b_secondaryText .pa_rating a,#b_content .pa_carousel .pa_item.pa_vCard .pa_caption
.b_secondaryText .pa_rating a,#b_content .pa_grid .pa_item.pa_vCard .pa_caption .b_secondaryText
.pa_rating a{color:var(--bing-smtc-foreground-content-neutral-secondary-alt)}#b_content .pa_carousel_mlo
.b_overlay .btn .cr{height:24px;width:20px;padding:var(--smtc-padding-ctrl-lg-text-top)
var(--smtc-padding-ctrl-sm-horizontal-default);background-color:var(--bing-smtc-foreground-ctrl-on-image-s
witchable-rest);border-radius:var(--smtc-corner-ctrl-lg-rest);box-shadow:var(--acf-elevation-3)}#b_content
.pa_carousel_mlo .b_overlay .btn
.cr>div{width:8px;height:8px;background-color:transparent;border-color:var(--smtc-foreground-content-neutr
al-primary);border-style:solid;border-width:2px 2px 0
0;transform:rotate(45deg);border-radius:0;top:var(--smtc-padding-ctrl-text-top);left:var(--smtc-padding-ctrl-s
m-text-top);position:relative;box-shadow:none;margin:0}#b_content .pa_carousel_mlo .b_overlay .btn
.cr>div::after{content:"";display:none}#b_content .pa_carousel_mlo .b_overlay
```

```
.btn.next{margin-right:6px}#b_content .pa_carousel_mlo .b_slideexp
.b_hoverFading{background:linear-gradient(90deg,var(--bing-smtc-background-ctrl-fade-on-primary-stop-0)
0%,var(--smtc-background-card-on-primary-default-rest) 60%);right:0}#b_content .pa_carousel_mlo
.b_slidesContainer{width:100%}html[dir="rtl"] #b_content .pa_carousel_mlo .b_overlay .btn
.cr>div{transform:rotate(135deg);left:calc(-1*var(--smtc-padding-ctrl-sm-text-top))}html[dir="rtl"]
#b_content .pa_carousel_mlo .b_slideexp
.b_hoverFading{background:linear-gradient(270deg,var(--bing-smtc-background-ctrl-fade-on-primary-stop-0)
0%,var(--smtc-background-card-on-primary-default-rest) 60%)}#b_content .pa_carousel_mlo
.slide,#b_content .pa_carousel .slide,#b_content .pa_grid
.pa_item{border-radius:var(--smtc-corner-card-rest)!important}#b_pole
.pa_carousel_mlo{margin-right:0}.pa_item.pa_vCard{word-wrap:break-word;line-height:20px;overflow:hidd
en}.pa_item.pa_vCard p strong,.pa_item.pa_vCard .pa_price strong{color:#111}.pa_item.pa_vCard
.pa_deal{text-decoration:line-through}#b_content .pa_item.pa_vCard
.b_attribution{font-size:14px;padding-bottom:0;line-height:20px}#b_content .pa_item.pa_vCard
p,#b_rrat_cont .pa_item.pa_vCard p{line-height:20px}#b_content .pa_item.pa_vCard
.pa_title{line-height:20px;overflow:hidden}.pa_item.pa_vCard
.b_footnote{line-height:17px;padding-bottom:0}.pa_item.pa_vCard
.pa_caption{padding-bottom:8px}.pa_item.pa_vCard .pa_caption,.pa_item.pa_vCard
.pa_title{padding-left:4px;padding-right:4px}.pa_item.pa_vCard
.b_finalText{position:absolute;width:100%;box-sizing:border-box;left:0;padding:0 4px 0
4px;bottom:8px}.pa_item.pa_vCard
.cico{display:block;padding-bottom:0;margin-bottom:8px;margin-left:auto;margin-right:auto;border-radius:0}
.pa_item.pa_vCard .pa_img{position:relative}.pa_item.pa_vCard .pa_price: hover,.pa_item.pa_vCard
.b_attribution: hover,.pa_item.pa_vCard .b_footnote: hover{cursor:pointer}.pa_carousel .slide{box-shadow:0 0
0 1px rgba(0,0,0,.1)!important}.pa_carousel .slide.see_more{box-shadow:0 0 0 0
rgba(0,0,0,0)!important}.pa_caption .pa_price: hover strong,.pa_hover .pa_hover_content .pa_price: hover
strong{text-decoration:underline;text-decoration-color:#111}.pa_caption .b_attribution: hover,.pa_hover
.pa_hover_content
.b_attribution: hover{text-decoration:underline}.pa_caption>.b_secondaryText: hover,.pa_hover
.pa_hover_content>.b_secondaryText: hover{color:#444}.b_ads1line{white-space:nowrap;overflow:hidden;te
xt-overflow:ellipsis;display:block}.pa_item .b_attribution cite,#b_content .pa_item .b_attribution
cite,.pa_hover .b_attribution cite,.pa_item .b_footnote .pa_url cite,#b_rrat_cont .pa_item .b_attribution
cite{color:#111;opacity:.8}#bpage.b_drk .pa_item .b_footnote .pa_url
cite{color:#d2d0ce}.pa_item.pa_vCard{cursor:pointer}@supports(-webkit-line-clamp:2){.b_adsTrunTx{displ
ay:-webkit-box;overflow:hidden;-webkit-box-orient:vertical;white-space:normal;visibility:visible}.b_ellipsis{
display:none}.b_adsTrunTx
.b_hiddenTx{display:inline}}.b_hiddenTx{display:none}.pa_item.pa_vCard,.pa_item.pa_hCard{position:relat
ive}.pa_hover{z-index:4}.pa_carousel .b_overlay .btn{z-index:5!important}.pa_item.pa_vCard
.pa_newtab_icon{display:none}.pa_item.pa_vCard .pa_newtab_icon,.pa_item.pa_hCard: hover
```

```
.pa_newtab_icon,.pa_hover
.pa_newtab_icon{position:absolute;background-color:rgba(0,0,0,.35);background-size:10px
10px;background-position:4px
4px;background-repeat:no-repeat;border-radius:var(--smtc-corner-circular);height:18px;width:18px;z-index:1
}.pa_item.pa_vCard .pa_newtab_icon,.pa_hover
.pa_newtab_icon{right:4px;top:4px}.pa_item.pa_hCard:hover
.pa_newtab_icon{left:110px;top:8px}.pa_item.pa_vCard .pa_newtab_icon,.pa_item.pa_hCard:hover
.pa_newtab_icon,.pa_hover
.pa_newtab_icon{background-image:url(
AAAUCAYAAACNiR0NAAAAA0kIEQVQ4EWNgGOyAkVIH/v//3xBoBg+l5sD1Aw08DcRwAJcglwE0iRu
I58FMZAQyTICGFZNoYBcjI+N5kB6g/klAKg2I24G4gQVISANxOBAvBWJiwDEshgUBNV4HYhWQDf5
A/JsYk5DVgFwGxD+A2AtZnCwDgYaUYjUMZDJQgmQXAvUIA7EjVD8nkO0McyUTjEEKDQzDt0C8H
6pnPpC2hekny0CYZiitjMynhoHI5jEMfgNBCRsEQDnGH8IkRRRA1gEy8D8Ur0GWIJH9I0T1w0k5AETBd
SUE2utkAAAAEIFTkSuQmCC)}.pa_hover{background-color:var(--smtc-background-web-page-primary);b
ox-shadow:none;position:absolute;opacity:0;visibility:hidden;word-wrap:break-word;cursor:pointer;overflow:
hidden;z-index:4;pointer-events:none}.pa_hover
.pa_hover_content{padding-bottom:var(--smtc-gap-between-content-x-small)}.pa_hover
.pa_hover_title,.pa_hover .pa_price,.pa_hover .b_attribution,.pa_hover .b_secondaryText,.pa_hover
.pa_additionTx,.pa_hover>div>.b_ads1line,.pa_hover .b_footnote,.pa_hover
.pa_hover_content>.pa_locInv{padding-left:var(--smtc-padding-ctrl-horizontal-default);padding-right:var(--s
mtc-padding-ctrl-horizontal-default)}.pa_hover .pa_hover_img{position:relative}.pa_hover .pa_hover_img
img{display:block;margin-left:auto;margin-right:auto}.pa_hover
.pa_hover_title{font:var(--bing-smtc-text-global-body3)!important;color:var(--smtc-ctrl-link-foreground-bran
d-rest);margin-bottom:var(--smtc-gap-between-content-x-small)}.pa_hover
.pa_hover_title:hover{text-decoration:underline}.pa_hover
.pa_price{margin-bottom:var(--smtc-gap-between-content-xx-small)}.pa_hover .pa_price
.prc_clr_grn{color:var(--smtc-status-success-tint-foreground)}.pa_hover .pa_price
strong{color:var(--smtc-foreground-content-neutral-primary);font:var(--bing-smtc-text-global-caption1-strong
)}.pa_hover .pa_price
.original_price{font:var(--bing-smtc-text-global-caption1);padding-left:var(--smtc-gap-between-content-x-sma
ll)}.pa_hover .pa_installmentDesc,.pa_hover .pa_unitprice,.pa_hover .vertical_converted_price,.pa_hover
.pa_shippingcost{font:var(--bing-smtc-text-global-caption1);margin-bottom:var(--smtc-gap-between-content-
xx-small);color:var(--bing-smtc-foreground-content-neutral-secondary-alt);padding-bottom:0}.pa_hover
.b_attribution{margin-bottom:var(--smtc-gap-between-content-xx-small);color:var(--bing-smtc-foreground-co
ntent-neutral-secondary-alt);border-bottom:0;font:var(--bing-smtc-text-global-caption1)}.pa_hover
.b_attribution
cite{font:var(--bing-smtc-text-global-caption1);color:var(--bing-smtc-foreground-content-neutral-secondary-al
t);opacity:unset}.pa_hover .pa_bcSeparator{margin:var(--smtc-gap-between-content-xx-small)
0;border-top:1px
solid #ecec}.pa_hover
```

```
.b_secondaryText{font:var(--bing-smtc-text-global-caption1);color:var(--bing-smtc-foreground-content-neutral-secondary-alt)}.pa_hover .b_secondaryText
.pa_rebateText{font:var(--bing-smtc-text-global-caption1);color:var(--bing-smtc-foreground-content-neutral-secondary-alt)}.pa_hover .b_secondaryText .pa_promo
a{color:var(--smtc-ctrl-link-foreground-brand-rest)}.pa_hover .b_secondaryText .pa_rating
a{color:var(--bing-smtc-foreground-content-neutral-secondary-alt)}.pa_hover .b_secondaryText
.b_colorBlend{color:var(--bing-smtc-foreground-content-neutral-secondary-alt)!important}.pa_hover
.pa_additionTx,.pa_hover
.pa_locInv{font:var(--bing-smtc-text-global-caption1);color:var(--bing-smtc-foreground-content-neutral-secondary-alt)}a.pa_hover_adLink:hover{text-decoration:none}.pa_hover:has(.pa_hover_content.pa_hcgp){border-radius:var(--smtc-corner-card-rest)}.pa_hover.ad_scpah.pa_animation{background-color:var(--smtc-background-card-on-primary-default-hover);box-shadow:var(--acf-elevation-3);pointer-events:auto}.pa_item.pa_vCard>a:hover{text-decoration:none}.pa_hover:not(:has(.b_pa_hov_indicator_c)) .pa_hover_img
img{margin-bottom:var(--smtc-gap-between-content-small)}.pa_hover.ad_scpah.pa_animation{transition:height var(--acf-animation-duration-default) var(--acf-animation-ease-default),background-color var(--acf-animation-duration-default) var(--acf-animation-ease-default),box-shadow var(--acf-animation-duration-default) var(--acf-animation-ease-default)}.b_pa_indicator_c{position:absolute;bottom:calc(-1*var(--smtc-gap-between-content-x-small));width:100%;display:flex;gap:var(--smtc-gap-between-content-xx-small);justify-content:center;forced-color-adjust:none}.b_pa_hov_indicator_c{position:relative;height:12px;display:flex;gap:var(--smtc-gap-between-content-xx-small);justify-content:center;align-items:center}.b_pa_ind_chev{position:absolute;height:36px;width:36px;background-size:cover;background-repeat:no-repeat;background-position:center}.b_tabhovcard
.b_pa_ind_chev{display:none}.b_pa_ind_chev.left{left:0}.b_pa_ind_chev.right{right:0}.b_pa_indicator{transition:width var(--acf-animation-duration-default) var(--acf-animation-ease-default)}.b_pa_indicator.sel{width:8px;height:4px;border-radius:var(--smtc-ctrl-badge-sm-corner);background-color:var(--smtc-foreground-content-brand-primary)}.b_pa_indicator:not(.sel){width:4px;height:4px;border-radius:var(--smtc-ctrl-badge-sm-corner);background-color:var(--bing-smtc-stroke-ctrl-strong)}.b_pa_ind_chev.left{background-image:url(/rp/agxFsUMkC673WmoTmnIMPxEe6ws.svg)}.b_pa_ind_chev.left:hover{background-image:url(/rp/xMN0EpA0PIBdEcQcjFfqG_vpETU.svg)}.b_pa_ind_chev.right{background-image:url(/rp/aEIX3ul9gwY0f2HW1RKDZD2xqCE.svg)}.b_pa_ind_chev.right:hover{background-image:url(/rp/E-Z-5a58Tr01Gv0dz1-0Mc32imE.svg)}.pa_img_slidec{max-width:100%}.pa_img_slides{display:flex;position:relative;transition:left .3s;left:0}.pa_img_slide{display:flex;justify-content:center;flex-shrink:0;flex-grow:0}.pa_img_slidec .pa_img_slides .pa_img_slide img{margin-left:0;margin-right:0;transform:none}.b_slideexp
.b_hoverFading{background:linear-gradient(90deg,rgba(255,255,255,.4) 0%,#fff 80%);position:absolute;top:0;right:-40px;width:40px;height:100%}.b_dark .b_slideexp
.b_hoverFading{background:linear-gradient(90deg,rgba(27,26,25,.4) 0%,#fff 80%)}.b_slideexp.hoverFading:hover .b_overlay>div:nth-child(3){width:calc(100% +
```

```
40px)}#slideexp3_B913E7 .slide { width: 140px; margin-right: 16px; }#slideexp3_B913E7c .b_slidebar .slide { border-radius: 6px; }#slideexp3_B913E7 .slide:last-child { margin-right: 1px; }#slideexp3_B913E7c { margin: -4px; } #slideexp3_B913E7c .b_viewport { padding: 4px 1px 4px 1px; margin: 0 3px; } #slideexp3_B913E7c .b_slidebar .slide { box-shadow: 0 0 0 1px rgba(0, 0, 0, 0.05); -webkit-box-shadow: 0 0 0 1px rgba(0, 0, 0, 0.05); } #slideexp3_B913E7c .b_slidebar .slide.see_more { box-shadow: 0 0 0 0px rgba(0, 0, 0, 0.00); -webkit-box-shadow: 0 0 0 0px rgba(0, 0, 0, 0.00); } #slideexp3_B913E7c .b_slidebar .slide.see_more .carousel_seemore { border: 0px; }#slideexp3_B913E7c .b_slidebar .slide.see_more:hover { box-shadow: 0 0 0 0px rgba(0, 0, 0, 0.00); -webkit-box-shadow: 0 0 0 0px rgba(0, 0, 0, 0.00); }SponsoredSee Solar Power Grid-connected Energy StorageHybrid Off-Grid / Grid-Tie Solar ...Kit - 17.8Kw Of Canadian Solar, 15Kw Midnite AIO, And 48 Kwh Midnite Powerflo Lithium Battery Bank$29,001.96Hybrid Off-Grid / Grid-Tie Solar Kit - 17.8Kw Of Canadian Solar, 15Kw Midnite ...AIO, And 48 Kwh Midnite Powerflo Lithium Battery Bank
```

Grid-scale storage refers to technologies connected to the power grid that can store energy and then supply it back to the grid at a more advantageous time - for example, at night, when no ...

Despite their potential, existing literature lacks comprehensive reviews and critical discussions on HESS applications in large-scale grid integration. This study conducts an in ...

Energy storage boosts electric grid reliability and lowers costs, 47 as storage technologies become more efficient and economically viable. One study found that the economic value of ...

Unlike off-grid systems that require expensive battery storage, grid-tied systems connect directly to your local utility grid, allowing you to generate clean electricity while ...

Explore the evolution of grid-connected energy storage solutions, from residential systems to large-scale technologies. Learn about solar advancements, smart grids, and how ...

Energy from sunlight or other renewable energy is converted to potential energy for storage in devices such as electric batteries. The stored potential energy is later converted to electricity ...

The most common type of energy storage in the power grid is pumped hydropower. But the storage technologies most frequently coupled with solar power plants are electrochemical ...

Web: <https://www.afasystem.info.pl>

