



New Energy Storage Technologies Empower Energy Power generation forecast for different energy sources worldwide, 1000TWhElectricalMechanical2. Energy storage can have a major impact on generators, grids and end usersIndependent energy storage stations are a rising trend among generators and grids?????Seed and Angel4. Opportunities and challenges for the energy storage industrysegments and targets.Yongdong LiuKPMG ChinaMindy DuMay ZhouWu WeiAssociationMichelle LiangAbout CEC Electric Transportation & Energy Storage AssociationFor a list of KPMG China offices, please scan the QR code or visit our website:Liquid fuels Natural gas Coal Nuclear Renewables (incl. hydroelectric) Source: EIA, Statista, KPMG analysis Depending on how energy is stored, storage technologies can be broadly divided into the following three categories: thermal, electrical and hydrogen (ammonia). The electrical category is further divided into electrochemical, mechanical and el?assets.kpmg ??????#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}#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,#serpvidans.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);height: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{color:var(--smtc-foreground-content-n
eutral-primary);height:var(--mai-smtc-padding-card-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.vsacf .b_title .mmtitle{margin-bottom:0}#serpvidans.vsacf .b_title .mmtitle
a{color:var(--smtc-foreground-content-neutral-primary)}#serpvidans.vsacf .cardless.mmlist
.mc_vtvc_con_rc,#serpvidans.vsacf .cardless.mmlist .mc_vtvc_th{height:auto}#serpvidans.vsacf
.vsb_tr_c.va_tt{margin:0}#serpvidans.vsacf .vtbc .mv_vtvc_play,#serpvidans.vsacf .vtbc
.mv_vtvc_play_ext{position:static}#serpvidans.vsacf .va_tt
.mc_vtvc_ban_lo{display:block}#serpvidans.vsacf .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.vsacf a.vsb_tr_t{color:var(--smtc-foreground-content-neutral-
primary)}.vsacf .va_tt .vsb_tr_chd .mc_vtvc_th_dock{height:92px;background:linear-
gradient(180deg,var(--bing-smtc-background-ctrl-fade-on-image-stop-0) 0%,var(--mai-smtc-
background-ctrl-on-image-rest) 100%)}#serpvidans.vsacf .va_tt a.vsb_tr_t{padding:0 var(--mai-smtc-padding-
```



```
card-default);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_ctt{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_vt
vc_title{white-space:normal;display:-webkit-box;-webkit-line-clamp:2;-webkit-box-
orient:vertical}#serpvidans.vsaf .b_module_expansion_control .b_btnContainer .b_CompactExpa
nsion{background-color:var(--bing-smtc-background-ctrl-neutral-rest);display:flex;justify-
content: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-foreground-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{conte
nt:"";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
.vsa{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_C
ompactExpansion{height:40px;line-height:40px;bottom:-6px;padding-left:20px;padding-
right:20px;border-radius:20px;z-index:6}#serpvidans .b_module_expansion_control
.b_CompactExpansionBtnText{line-height:40px}#serpvidans .b_title .b_topTitle,#serpvidans
.mc_vtvc .mc_vtvc_title{margin-bottom:0}#serpvidans .mc_vtvc_meta_pubdate{padding-
bottom:0}#serpvidans{position:relative;--va-expbody-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-expbody-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
.expevt{display:none}#b_results .b_ans.b_vidAns{--va-ptop:16px;--va-pbop:0px;--va-
pleft:20px;--va-pright:20px;border-radius:6px;box-shadow: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{d
isplay: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;posi-
tion:relative;border-radius:6px;overflow:hidden}.mc_vtvc.noshadow{box-shadow:none}.mc_vtvc
_con_rc{border-radius:6px;overflow:hidden;position:relative}.mc_vtvc>a{color:#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{back-
ground-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}#serpvidans .b_topTitle{margin-b
ottom: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;botto
m:0;left:0;right:0}.mc_vtvc_ht{width:100%;padding:0 16px;line-height:16px;color:#fff;text-decor-
ation:underline;word-break:break-word;box-sizing:border-box;vertical-align:middle;text-align:cen-
ter}.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_lRigh-
t .b_lLeft{margin:0 0 0 1px;height:14px;line-height:14px;padding:2px 8px;background:rgba(0,0,0,
```




```
.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-bl
ock;line-height:18px;position:relative;width:100%}.mc_vtvc_meta_block{bottom:0;position:absol
ute;width:100%}.mc_vtvc_meta_row{line-height:16px;font-size:11px;height:17px;overflow:hidde
n;text-overflow:ellipsis;white-space:nowrap}.mc_vtvc_meta_row a{display:inline-
block}.mc_vtvc_meta_row a:hover{text-decoration:underline}.mc_vtvc_meta_block_area{positio
n:relative}.mc_vtvc_meta_block,.mc_vtvc_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{lin
e-height:18px;padding-bottom:4px;font-weight:bold;color:#00809d;text-transform:uppercase;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-dec
oration:none}.mc_vtvc_meta_pubdate{color:#444;padding-bottom:3px}.mc_vtvc_meta_channel{
color:#444}.mc_vtvc_meta_w,.mc_vplvc_meta_w{position:relative}.mc_vtvc_meta_bg_w,.mc_v
plvc_meta_bg_w{height:100%;width:100%;overflow:hidden;position:absolute;top:0}.mc_vtvc_m
eta_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{t
op:0}.emptyStyleForDebuggingPurpose{top:0}.emptyStyleForDebuggingPurpose{top:0}.emptySt
yleForDebuggingPurpose{top:0}.emptyStyleForDebuggingPurpose{top:0}.emptyStyleForDebugg
ingPurpose{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( FUCB1jmMoABKuaQcSqQhCxKgFGgLhNQlKpQAwA8zkLyQA16F0AAAAASUVORK5CYII=)}.mc_bc_w{height:18px;padding:8px;text-align:right}.mc_bc{background-color:rgba(0,0,0,.75);padding: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)}.vrhdata{display:none}.mmgrid>div{width:197px;display:inline-block;margin-right:8px;margin-bottom:8px;box-shadow:0 0 0 1px rgba(0,0,0,.05);position:relative;vertical-align:top;overflow:hidden;white-space:normal;border-radius:6px}.vsarr .mmgrid>div,.vsarr 1stbig .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}.vsarr 1stbig .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:.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:.9px){#serpvidansrr .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 .vi
deo_metadata>h3{white-space:nowrap;overflow:hidden;text-overflow:ellipsis;-webkit-line-clamp:
1;line-height:15px;height:15px;font-size:13px;color:#000;margin-bottom:20px;font-
family:"Arial",Helvetica,Sans-Serif;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}.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-body3-strong)}.pffvi{display:none;background:url(/r
p/2mUuVWykLMMsWSN7M4cQxcqE3k4.svg) center no-repeat;background-
size:contain;width:14px;height:14px}[data-tps="L"] .pffvt{font:var(--bing-smtc-text-global-
subtitle2-strong)}[data-tps="S"] .pffvi{width:24px;height:24px}.hvpv.h5s .pffvi,.hvpv.h5s[data-
tps="M"] .pffvt,.hvpv.h5s[data-tps="L"] .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:ce
nter;padding:var(--smtc-gap-between-content-x-small);gap:var(--smtc-gap-between-content-x-
small);box-sizing:border-box}.vrhcp .vrhol{position:absolute;width:100%;height:35px;max-
height:35px;bottom:0;left:0;padding:0;background:none;display:block;z-index:9}.vrhcp
.vrhol.hide,.vrhcp .vrhol .hide{display:none}.vrhot{white-space:nowrap;text-overflow:ellipsis;ove
rflow:hidden;display:inline-block;position: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:8px 8px;margin-left:0;top:0;box-sizing:border-
box;position:relative}.vrhc .ricons{position:absolute;right:8px;top:10px;left:auto;bottom:auto;heig
ht:18px;display:inline-block;cursor:pointer}.vrhol.icons_1 .vrhot{margin-
```



```
right:27px}.vrhol.icons_2      .vrhot{margin-right:49px}.vrhol.icons_3      .vrhot{margin-
right:79px}.vrhol      .vrhot      nt,.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      nt{width:0;background:#fff}.vpb
nt.test{display:none}.vpb.back{background-color:#999}.vrhcb      .vrhol.npb{height:36px;max-
height:36px}.vrhol      .vadda{width:22px;height:18px;padding:0;margin-right:0;margin-left:2px;bott
om:0;position:relative;display:inline-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;m
argin-left:1px;margin-right:1px;position:relative;display:inline-block}.vol.hide,.vol
.hide{display:none}.vol      .bg{background:rgba(0,0,0,.75);border-radius:2px}.vol.bg,.vol
nt{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      nt
.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}.vol
MuteHandle{width:22px;height:18px}.vo{background:url(/rp/fFZxBXEIP9WYOO0jhTaElyLhE
VU.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}.vrhtc
.hide{display:none}.vrh_clc      .vt_vp,.vrh_clc      .vrhtc      .vrhi,.vrh_clc
.player_ol{cursor:pointer}.vrh_clc      .cico{border-
radius:0}.vrhtc{border:hidden;top:0;left:0;padding:0}.vrhc.mousefollow      .vrhtc,.vrhc.popout
.vrhtc{background-color:#999}.vrhtpc.load
.player_ol{background:url(/rp/J_o2maogFDeUOsovPjL-ofEuxJ4.gif)      center      center      no-
repeat}.vrhc      line      .vrhtc      .vrhi,.vrhc.popout      .vrhtc      .vrhi,.vrhc.mousefollow      .vrhtc      .vrhi{position:abso
lute!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.popout,.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
}.vrhcp{position:relative;top:0;left:0;display:table-row}.vrhcp
.vrhtc{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,.vr
hc: visited{color:#000;text-decoration:none}.vrhc.vrh_clic{cursor:pointer}a.hover-anchor{display:
block;height:100%;width:100%;text-decoration:none}.vrhstat{height:0;overflow:hidden}.grad{wi
dth:100%;height:24px;position:absolute;bottom:0;background:linear-
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_btnContainer{width:100%;height:46px;border-radius:0
6px 6px 0;position:absolute;bottom:-20px}.b_CompactExpansion:active{background-color:#0052
6b}.b_CompactExpansion:hover{background-color:#106ebe;cursor:pointer}.b_CompactExpansio
n{background-color:#106ebe;color:#fff;border-radius:16px;height:30px}.b_CompactExpansion{di
splay:inline-block;line-height:30px;text-align:center;padding-left:16px;padding-right:16px;positio
n: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_Co
mpactExpansionBtnText{font-family:inherit;font-style:normal;font-weight:400;font-size:13px;line-
height:20px;color:#fff;display:inline-block}new energy power generation technology and energy
storage tech????51:34Mechanical Batteries: The Future of Energy Storage? | FD EngineeringFree
Documentary - Engineering??? 149.1? ?11 ??????????11:52Innovations for a new era of energy
storage | Transforming BusinessDW News??? 23? ?2024?6?24?????14:52Two Innovative Energy
Storing Methods | Engineering The FutureCuriosity Stream??? 1.6?

```



?2024?8?23????????????#b_results h2 #kn_p,#b_results h3 #kn_p,#b_results h4
#kn_p{position:relative;display:inline}#b_pole #kn_p,#b_ans
#kn_p{display:none}#kn_a{color:#4007a2;font:14px
arial;left:-20px;position:absolute;top:25%}.b_title #kn_a,#b_overflow
#kn_a{left:-3px;position:relative}.b_adBottom .b_adscv{content-visibility:auto;margin-left:-22px;
padding-left:22px;margin-right:-22px;padding-right:22px;margin-bottom:-16px;padding-
bottom:16px}#b_content .b_ad .b_secondaryText .b_colorBlend{color:#71777d}#b_results>.b_ad
.b_colorBlend,#b_topw.b_results_eml>.b_ad .b_colorBlend{color:#71777d}#b_results>.b_ad
.b_accentColor,#b_context>.b_ad .b_accentColor,#b_rrat_cont>.b_ad
.b_accentColor,#b_topw.b_results_eml>.b_ad .b_accentColor{color:#71777d}#b_context>.b_ad
.b_colorBlend,#b_rrat_cont>.b_ad .b_colorBlend{color:#71777d}#b_dynRail>.b_ad
.b_colorBlend{color:#71777d}.pa_hover .b_secondaryText
.b_colorBlend{color:#71777d}#b_pole .pa_carousel .b_secondaryText .b_colorBlend{color:#7177
7d}.hsl_carousel{padding-top:var(--smtc-gap-between-content-xx-small);padding-
bottom:var(--smtc-gap-between-content-xx-small)}.hsl_carousel .b_slideexp{margin-
bottom:0}.hsl_carousel .slide{width:auto!important;border:1px solid var(--bing-smtc-stroke-ctrl-
default)}.hsl_carousel .sl_item{font:var(--bing-smtc-text-global-body3)}.hsl_carousel .sl_item
strong{font-weight:normal}.hsl_carousel .sl_item a{display:flex;align-
items:center;padding:var(--smtc-gap-between-content-x-small) var(--smtc-gap-between-content-
small);gap:var(--smtc-gap-between-content-x-small);text-decoration:none}.hsl_carousel .sl_item
a:hover{background:var(--smtc-background-card-on-flyout-default-hover)}.hsl_carousel .sl_item
a:active{background:var(--smtc-background-card-on-primary-default-pressed)}.hsl_carousel
.sl_item svg{fill:var(--bing-smtc-foreground-content-neutral-tertiary)}.hsl_carousel .sl_item
.b_adsIline{color:var(--bing-smtc-foreground-content-neutral-secondary-
alt)}#slideexp2_3BDC19 .slide { margin-right: 8px; }#slideexp2_3BDC19c .b_slidebar .slide {
border-radius: 6px; }.slide_mask { background-color: black; } #slideexp2_3BDC19 .slide:last-
child { margin-right: 0px; }#slideexp2_3BDC19 .slide:first-child { margin-left: 0px; }
#slideexp2_3BDC19 .slide:first-child .slide_mask { opacity: 0; }ABB ElectrificationBattery
Technology for Rail | Battery System SolutionsDiscover advanced battery protection for railway
systems. Download ABB's new eBook. Learn more - boost rolling stock reliability with ABB's
expert battery solutions.Popular Links: Robotics · Utility · Technology ·
Utilities · Safety · Robots · AutomotiveTop 10: Emerging Technologies |
Energy MagazineFrom EV infrastructure & renewable energy storage to smart grid management
& predictive analysis, here are 10 technologies impacting the Energy storage technologies: An
integrated survey of Energy Storage Technology is one of the major components of renewable
energy integration and decarbonization of world energy systems. It significantly benefits Six of
the most promising new green power technologiesThe CSP technology has, however, re-emerged
as a promising new green power technology during recent years with new innovations in 10



cutting-edge innovations redefining energy storage solutions From iron-air batteries to molten salt storage, a new wave of energy storage solutions is set to unlock resilience for tomorrow's grid. 7 Innovative Technologies for Electricity Generation Explore cutting-edge technologies for electricity generation and storage. Learn how CUSTOM SOFTWARE DEVELOPMENT can drive Africa's sustainable Top 10: Energy Storage Technologies | Energy Magazine However, these can't happen without an increase in energy storage. Battery storage in the power sector was the fastest growing energy CHINA'S ACCELERATING GROWTH IN NEW TYPE The Coverage and Intensity of Policies Continuing to Increase Technological breakthrough and industrial application of new type storage are included in the energy work of the National New Energy Power Generation Automation and This book is the 1st volume of proceedings of the 1st Smart Nuclear Power Technology Forum and the 8th China Nuclear Power Plant Digital Technology Next-Generation Grid Technologies The grid was originally designed for large, centralized generation sources delivering power in one direction to consumers, but in recent years, several factors - such as customer demands, New energy technology research Global research in the new energy field is in a period of accelerated growth, with solar energy, energy storage and hydrogen energy receiving extensive attention from the global research Energy Storage Technology This book, focusing on the rapid development of energy storage technology at home and abroad and combining research and application achievements in energy storage and new energy Demands and challenges of energy storage This paper addresses the pressing necessity to align the regulatory capacity of renewable energy sources with their inherent Energy Storage Technology This book, focusing on the rapid development of energy storage technology at home and abroad and combining research and application achievements in energy storage and new energy Progress and prospects of energy storage technology research: The development of energy storage technology (EST) has become an important guarantee for solving the volatility of renewable energy (RE) generation and promoting the These are the top five energy technology trends of There are several key energy technology trends dominating . Security, costs and jobs; decarbonization; China; India; and AI all need to be carefully monitored. The World Comprehensive review of energy storage systems technologies, Energy storage is one of the hot points of research in electrical power engineering as it is essential in power systems. It can improve power system stability, shorten energy Microsoft Word The uses for this work include: Inform DOE-FE of range of technologies and potential R& D. Perform initial steps for scoping the work required to analyze and model the benefits that could Energy Storage Technology Powering the Future of Energy storage technology is reshaping global grids, making renewables reliable, flexible, and vital for tomorrow's clean energy landscape. Research Status and Development Trend of Gravity Energy Storage Technology The results of patent analysis show that more and more new renewable energy generation systems based on gravity energy storage systems have emerged in recent years. Power Generation Technology The 5th Energy Development and Power Generation Technology Symposium and IEEE International Standard Call for papers on cutting-edge



technologies and large model Top 10 Energy Storage Trends in | StartUs Insights Distributed energy storage solutions such as EVs, microgrids, and virtual power plants (VPPs) avert the expansion of coal, oil, and gas Energy Storage Technologies for Modern Power Systems: A Energy storage technologies can potentially address these concerns viably at different levels. This paper reviews different forms of storage technology available for grid Battery Storage Advancements: What's Next for the We explore key developments in battery storage technology. These innovations are reshaping how we generate, distribute, and consume Energy Technology News -Energy News and Research. From super-efficient hybrid vehicles to new energy sources, read all the latest science news from leading energy technology laboratories around NEW ENERGY TECHNOLOGY RESEARCH 3. The level of transformation of new energy research to applicable technologies is relatively low globally, and industry- academia-research integration needs to be further strengthened. Top 10 Energy Storage Trends in : The Future of RenewablesThe industry is transitioning toward long-duration storage, decentralized solutions, and new battery chemistries. As the world shifts to renewable energy, scalability, affordability, Battery Storage Advancements: What's Next for the We explore key developments in battery storage technology. These innovations are reshaping how we generate, distribute, and consume Top 10 Energy Storage Trends in : The Future of RenewablesThe industry is transitioning toward long-duration storage, decentralized solutions, and new battery chemistries. As the world shifts to renewable energy, scalability, affordability, The Application analysis of electrochemical energy storage technology Finally, the prospect and development trend of energy storage technology in the new energy generation side in the future are prospected, four directions are given. The Future of Energy Storage | MIT Energy InitiativeMITEI's three-year Future of Energy Storage study explored the role that energy storage can play in fighting climate change and in the global adoption of clean Innovation Spotlight: Four Technologies That Could The energy expansion requires innovation and deployment of new technologies to provide dispatchable electricity supporting other clean The energy storage space is heating up. Here are Achieving the Biden administration's goal of decarbonizing the power sector by will require a slew of energy storage technologies China's Energy Technology Innovation and Industrial The new gravity energy storage technology based on the same principle can changes the energy storage medium from water to solid material, which makes the application The Future of Energy Storage: Five Key Insights on Breakthroughs in battery technology are transforming the global energy landscape, fueling the transition to clean energy and reshaping of Power Generation Technology Energy Storage in a 2.1. Principle of the technology Gravity energy storage power generation technology, an emerging power generation method, has a similar basic principle with the pumped-storage technology. It Research review on electrical energy storage technologyFinally, considering the characteristics and requirements of the micro grid, distributed generation, new energy power generation, smart grid, energy Internet and electric vehicles, both some Energy Department Pioneers New Energy Storage InitiativesThe GSL is an energy storage research and testing facility that will accelerate development of next-



new energy power generation technology and energy storage technolog

generation grid energy storage technologies that are safer, more cost

Web:

<https://www.liberalnaedukacja.pl>