

Distributed Energy Storage solar





Overview

What are distributed energy resources?

Distributed energy resources, or DER, are small-scale energy systems that power a nearby location. DER can be connected to electric grids or isolated, with energy flowing only to specific sites or functions. DER include both energy generation technologies and energy storage systems.

What is distributed energy generation?

When energy generation occurs through distributed energy resources, it's referred to as distributed generation. While DER systems use a variety of energy sources, they're often associated with renewable energy technologies such as rooftop solar panels and small wind turbines.

What is energy storage?

Energy storage is the capturing and holding of energy in reserve for later use. Examples of energy storage technologies used as distributed energy resources include: Battery storage is the most common form of electricity storage.

Can distributed energy resources reduce power outage impact?

This paper explores the integration of Distributed Energy Resources (DER) as a mitigation strategy to reduce the power outage impact in various aspects, namely, minimizing outages and lowering their cost for customers, ensuring DER adaptation cost-effectiveness for the households, and realizing long-term environmental benefits.



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Distributed Energy Storage Solutions for Solar Grid ...

As a result, managing distributed energy storage resources has become critical for furthering distributed solar energy development. With grid connection capacity for distributed solar ...

What are the advantages of distributed solar energy storage ...

Apr 10, 2025 · 1?Solar Distributed Light Storage Solution Overview Solar distributed photovoltaic storage system is the solar photovoltaic power generation and storage equipment in a ...

Solar Integration: Distributed Energy Resources and ...

Distributed Energy ResourcesIslands and MicrogridsBlack StartAdditional InformationSolar DER can be built at different scales--even one small solar panel can provide energy. In fact, about one-third(link is external)of solar energy in the United States is produced by small-scale solar, such as rooftop installations. Household solar installations are called behind-the-meter solar; the meter measures how much electricity a consumer 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,#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



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2354%2010.1923C13.2355%209.62986%2012%2010.3524%2012%2011.4997V20.5C12%2021.647
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023.2551%2015.2661%2022.2357%2014.6926L14.2354%2010.1923Z%22%20fill%3D%22white%2
2%20fill-opacity%3D%220.9%22%2F%3E%0D%0A%3C%2Fsvg%3E)}.mmlist .mc_vtvc{margin:10px
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color:#3c3c3c}body.b_dark{--video-metadata-channel-color:unset}.vsarf
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ctrl-on-image-hover);transition:background-color .5s;display:flex;align-items:center;justify-content:c  
enter;padding:var(--smtc-gap-between-content-x-small);gap: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}.s  
mtplayerhtml5.hide{display:none}.pffvt{display:none;color:var(--mai-smtc-foreground-ctrl-on-imag  
e-rest);font:var(--bing-smtc-text-global-  
subtitle2-strong)}.pffvi{mask:url(/rp/ui07wU6K7FR_inzG7DRbP1i8fGo.svg) center no-repeat;mask-si  
ze: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 .vrhctc.pffv .vrhol{display:none}.hvpv.h5s .vrhctc.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);gap:var(--smtc-gap-between-content-x-small);box-sizing:border-box}.pffvt{text-  
decoration:underline}.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;overfl  
ow: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:2px 8px;margin-left:0;top:0;box-sizing:border-  
box;position:relative}.vrhc .ricons{position:absolute;right:8px;top:10px;left:auto;bottom:auto;heigh  
t: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}.vrhcp .vrhol.npb{height:36px;max-  
height:36px}.vrhol .vadda{width:22px;height:18px;padding:0;margin-right:0;margin-left:2px;botto  
m: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;mar  
gin-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;wi  
dth: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}.volMutelcon{width:16px;height:14px;margin:2px 4px;float:left}.volMuteHandle{width:  
22px;height:18px}.vo{background:url(/rp/ffZxBXEIP9WYOO0jhTaElyLhEVU.svg) no-
```



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repeat}.vm{background:url(/rp/fsX-ZVd03wB2TL0vmQjxSp4U9vs.svg) no-repeat}.vl{background:url(/rp/YXYMPC1Rry_XJGc7Yg8lR4B2eEs.svg) no-repeat}.vf{background:url(/rp/NosrlR4amKTs1zYxWy3laZN3HRk.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}.vrhrc .hide{display:none}.vrh_clc .vt_vp,.vrh_clc .vrhrc .vrhi,.vrh_clc .player_ol{cursor:pointer}.vrh_clc .cico{border-radius:0}.vrhrc{border:hidden;top:0;left:0;padding:0}.vrhc.mousefollow .vrhrc,.vrhc.popout .vrhrc{background-color:#999}.vrhrc.load .player_ol{background:url(/rp/_o2maogFDeUOsovPJL-ofEuxJ4.gif) center center no-repeat}.vrhc line .vrhrc .vrhi,.vrhc.popout .vrhrc .vrhi,.vrhc.mousefollow .vrhrc .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.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}.vrhrcp{position:relative;top:0;left:0;display:table-row}.vrhrcp .vrhrc{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:none}.vrhc.vrh_clc{cursor:pointer}a.hover-anchor{display:block;height:100%;width:100%;text-decoration:none}.vrhstat{height:0;overflow:hidden}Videos of Distributed Energy Storage SolarWatch video on ibm What Are Distributed Energy Resources (DER)? , IBMibm Jun 4, 2024Watch video on energy.govResilient Distribution Systems Powered by Solar Energyenergy.govFeb 19, 2021Watch video on ibm What Is Distributed Generation? , IBMibm Jun 9, 2024Watch full video.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-primary);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}.iacfm .iacf_head .iacf_chv{color:var(--smtc-foreground-content-neutral-primary)}[dir='rtl'] .iacfm .iacf_head svg{transform:scaleX(-1)}#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_crsl[dat a-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-self: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 .acflmgAns .salink,#b_content .acflmgAns .iasalink{text-align:center;display:block;padding-bottom:var(--smtc-gap-between-content-medium)}#b_content .acflmgAns .salink:hover .iasabt,#b_content .acflmgAns .iasalink:hover .iasabt{background:var(--bing-smtc-background-ctrl-outline-hover)}#b_content .acflmgAns .salink:active .iasabt,#b_content .acflmgAns .iasalink:active .iasabt{background:var(--bing-smtc-background-ctrl-outline-pressed)}#b_content .acflmgAns .iasabt,#b_content .acflmgAns .iaExp_chvron{height:initial;border-radius:var(--smtc-corner-circular);background:var(--bing-smtc-background-ctrl-neutral-rest);display:inline-block;position:relative;top:0;box-shadow:initial}#b_content .acflmgAns .iasatxt{font:var(--bing-smtc-text-global-caption1-strong);color:var(--bing-smtc-foreground-content-brand-rest);padding:var(--smtc-gap-between-content-x-small) var(--smtc-gap-be
```



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tween-content-small);display:flex;gap:var(--smtc-gap-between-content-x-small);justify-
content:center;align-items:center}#b_content .acflmgAns .salink::before,#b_content .acflmgAns
.iasalink::before{border-bottom:1px solid var(--smtc-stroke-ctrl-on-neutral-
rest);width:100%;display:block;content:"";top:18px;position:relative}#b_content .acflmgAns
.svg{vertical-align:top}#b_content .acflmgAns .svgpath{fill:var(--bing-smtc-foreground-content-
brand-rest)}#b_content .acflmgAns .iachevron,#b_content .acflmgAns
.svgicon{width:12px;height:12px;margin-left:0;position:relative;top:0}html[dir=rtl] #b_content
.acflmgAns .iachevron,html[dir=rtl] #b_content .acflmgAns
.svgicon{transform:scaleX(-1)}#b_content .acflmgAns .rel_ent_w a.rel_ent{border:1px solid
var(--acf-stroke-neutral-decorative)}#b_content .acflmgAns .iaheader .iacf_head{text-decoration-
color:var(--smtc-foreground-ctrl-neutral-primary-hover)}#b_content .acflmgAns .iaheader
.iacf_head span,#b_content .acflmgAns .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_crsI[data-wptds-
carousel]{margin:0;padding-bottom:var(--smtc-gap-between-content-medium)}#b_content
.iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel] [data-wptds-carousel-controls]{--wptds-carousel-
control-opacity:1}#b_content .iacfic.mmkiaacf .iacf_crsI[data-wptds-
carousel]>div{padding:0}#b_content .iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel] [data-
direction="end"]{margin-right:-22px}#b_content .iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel]
[data-direction="end"] svg{transform:scaleX(-1)}#b_content .iacfic.mmkiaacf .iacf_crsI[data-wptds-
carousel] [data-direction="start"]{margin-left:-22px}#b_content .iacfic.mmkiaacf .iacf_crsI[data-
wptds-carousel] [data-direction="start"] svg{transform:scaleX(1)}#b_content .iacfic.mmkiaacf
.iacf_crsI[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_crsI[data-wptds-carousel]
button:hover{background:var(--smtc-background-card-on-primary-default-hover)}#b_content
.iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel] button:active{background:var(--smtc-background-
card-on-primary-default-pressed)}#b_content .iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel]
button svg{transition:initial}#b_content .iacfic.mmkiaacf .iacf_crsI[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 .acflmgAns .iaheader
.iacf_head{gap:0;padding:var(--smtc-gap-between-content-medium) 0;display:flex;align-
items:center;box-sizing:border-box}#b_content .acflmgAns .iaheader .iacf_head:hover{text-
decoration:none}#b_content .acflmgAns .iaheader .iacf_head:hover span{text-
decoration:underline}#b_content .acflmgAns .iaheader .iacf_head:hover
.iacf_chv{background:initial}#b_content .acflmgAns .iaheader .iacf_head div{display:flex;align-
items:center;transition:background 300ms ease-out;margin-right:-3px;border-radius:var(--smtc-corn-
er-ctrl-rest);overflow:hidden;color:var(--bing-smtc-foreground-content-neutral-secondary-
alt)}#b_content .acflmgAns .iaheader .iacf_head span{width:initial;flex:none;font:var(--bing-smtc-te
xt-global-subtitle1-strong);padding-inline-start:var(--mai-smtc-padding-card-default);max-
width:90%;text-overflow:ellipsis;white-space:nowrap;overflow:hidden}#b_content .acflmgAns
.iaheader .iacf_head .iacf_chv{width:22px;justify-content:center;height:22px}#b_content
.acflmgAns .rel_ent_w{margin-top:0}#b_content .acflmgAns .rel_ent_w
.b_slideexp{margin:0}#b_content .acflmgAns .rel_ent_w .btn.rounded{top:initial;margin-
top:1px}#b_content .acflmgAns .rel_ent_w .btn.next{right:-14px}#b_content .acflmgAns .rel_ent_w
.cr>div{width:36px;height:38px;border-radius:var(--smtc-corner-ctrl-lg-rest);background:var(--bing-
smtc-background-container);box-shadow:var(--acf-elevation-3);border:initial}#b_content
.acflmgAns .rel_ent_w .cr>div:after{margin-inline-start:2px;top:0}#b_content .acflmgAns
```



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.rel_ent_w .b_viewport{padding-top:0;margin-left:0;padding-left:0}#b_content .acflmgAns
.rel_ent_w .b_viewport .slide{height:38px;margin-left:0;margin-inline-end:var(--smtc-gap-between-
content-x-small)}#b_content .acflmgAns .rel_ent_w a.rel_ent{border-radius:var(--smtc-corner-circul
ar);background:var(--smtc-background-card-on-primary-default-rest);padding-
left:0;height:38px}#b_content .acflmgAns .rel_ent_w a.rel_ent:hover{background:var(--smtc-
background-card-on-primary-default-hover)}#b_content .acflmgAns .rel_ent_w
a.rel_ent:active{background:var(--smtc-background-card-on-primary-default-pressed)}#b_content
.acflmgAns .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 .acflmgAns .rel_ent_w .rel_ent_tw{font:var(--bing-smtc-text-global-
caption1-strong)}#b_content .acflmgAns .rel_ent_w .rel_ent_c{padding-left:0}#b_content
.acflmgAns .rel_ent_w .b_slidebar{padding-inline-start:var(--mai-smtc-padding-card-
default)}#b_content .acflmgAns .rel_ent_w .rel_ent_c .rel_ent:first-child{margin-inline-
start:var(--mai-smtc-padding-card-default);align-items:center}#b_content .acflmgAns .rel_ent_w
.rel_ent_t{max-width:250px}html[dir=rtl] #b_content .acflmgAns .iaheader .iacf_head
svg{transform:scaleX(-1)}html[dir=rtl] #b_content .acflmgAns .iacf_crsl[data-wptds-carousel] [data-
direction="end"]{transform:scaleX(-1)}html[dir=rtl] #b_content .acflmgAns .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_sml{outline:3px dotted
#1aebff;outline-offset:-5px}.iacfm .iacfmit .cico{position:relative}.iacfm .iacfmit .cico::after{conten
t:"";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)}.iacfic{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}.iacfic .iacfmit{position:absolute}.iacfic .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)}.iacfm.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-
```



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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-carou
sel-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;bord
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img,.b_wpt_container .iacfic .iacfmit .iacfimgc img{width:100%;height:100%;object-
fit:cover}Images of Distributed Energy Storage SolarWärtsilä's DC-coupled solar-plus-storage hybrid
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Quality 100kw/215kwh Contains Solar Panel Charging Function Decentralized and Distributed
Energy Sources 101 , NATiVE SolarDistributed Energy Storage , The Climate Tech HandbookSee
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color:#000;opacity:.6;position:fixed;top:0;left:0;width:100%;height:100%}IBMWhat Are Distributed
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