

Overview
 Planning Your Wind Turbine
 Assembling the Spindle and Spokes of a Vertical Axis Wind Turbine
 Mounting the Magnets of a Vertical Axis Wind Turbine
 Finishing Your Turbine Assembly
 Installing Turbine Electrical Components

A wind turbine is a simple mechanical device similar to the windmill. The blades of your turbine will catch air currents, using that motion to transmit mechanical energy along a drive shaft. This shaft will then turn the components of a generator, creating clean, renewable energy for your household and cutting down on your electric bills. What's mo...See more on wikihow

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.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(--bing-smtc-text-global-body3-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-default);overflow:hidden}.iacfm .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:focus-visible{outline-offset:-6px}.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;overflow: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:visible}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_sidebar .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(.splt2) .rel_ent_tw,.aqptmt:not(.splt2) .rel_ent_tw .rel_ent_t{overflow:hidden;text-overflow:ellipsis;white-space:nowrap}.aqptmt:not(.splt2) .rel_ent_tw{display:flex;overflow:hidden;text-overflow:ellipsis;align-items:center;white-space:nowrap}.rel_e
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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_crsl[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-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 .acfImgAns
.salink,#b_content .acfImgAns
.iasalink{text-align:center;display:block;padding-bottom:var(--smtc-gap-between-content-medium)}#b_content
nt .acfImgAns .salink:hover .iasabt,#b_content .acfImgAns .iasalink:hover
.iasabt{background:var(--smtc-background-ctrl-neutral-hover)}#b_content .acfImgAns .salink:active
.iasabt,#b_content .acfImgAns .iasalink:active
.iasabt{background:var(--smtc-background-ctrl-neutral-pressed)}#b_content .acfImgAns .iasabt,#b_content
.acfImgAns
.iaExp_chevron{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 .acfImgAns
.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-between-content-small);display:flex;gap:var(--smtc-gap-between-content-x-small);justify-content: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_content
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(--mai-smtc-corner-card-default)}#b_content
.iacfic.mmkiaacf .iacf_plan .cico img{border-radius:var(--mai-smtc-corner-card-default)}#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_content
ent .iacfic.mmkiaacf .iacf_crsl[data-wptds-carousel]

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[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(--bing-smtc-shadows-card-hover-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
.iacffic.mmkiaacf .iacf_crsl[data-wptds-carousel]
button:active{background:var(--smtc-background-card-on-primary-default-pressed)}#b_content
.iacffic.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-color 300ms
ease-out;margin-right:-3px;border-radius:var(--smtc-corner-ctrl-rest);overflow:hidden;color:var(--bing-smtc-foreground-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:0;max-width:90%;text-overflow:ellipsis;white-space:nowrap;overflow:hidden}#b_content .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-background-container);box-shadow:var(--bing-smtc-shadows-card-hover-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-default-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

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.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_sidebar{padding-inline-start:0}#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}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)}.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(--mai-smtc-corner-card-default)}.iacfca .iacf_crsl
.iacfmit{overflow:hidden;position:relative}.iacfca .iacf_crsl .iacfmit
.cico{overflow:hidden;border-radius:var(--mai-smtc-corner-list-card-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]

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[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-sm
tc-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 .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%)}.iacfca[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-c
arousel][data-default]
[hidden]{display:none}[data-wptds-carousel][data-default][data-visually-hidden],[data-wptds-carousel][data-d
efault] [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-car
ousel-control-box-shadow:0rem .125rem .1875rem rgba(0,0,0,.1);--wptds-carousel-control-fg-color:#767676;--wptds-carousel-control-size:2rem;display:block;po
sition: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:10
0%;-ms-overflow-style:none;scrollbar-width:none}[data-wptds-carousel][data-default]

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[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-wptds-carousel][data-default]
[data-wptds-carousel-controls]>*[flex-grow:0;flex-shrink:0][data-wptds-carousel][data-default]
[data-wptds-carousel-control]{cursor:pointer;inline-size:var(--wptds-carousel-control-size);aspect-ratio:1;display:grid;place-content:center;border-radius:50%;background-color:var(--wptds-carousel-control-bg-color);border:.0625rem solid
var(--wptds-carousel-control-border-color);box-shadow:var(--wptds-carousel-control-box-shadow);color:var(--wptds-carousel-control-fg-color);opacity:var(--wptds-carousel-control-opacity);pointer-events:all}[data-wptds-carousel][data-default]
[data-wptds-carousel-control]:active{--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}[data-wptds-carousel][data-default]
[data-wptds-carousel-control]: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-control] *{pointer-events:none}[data-wptds-carousel][data-default]
[data-wptds-carousel-control]>svg{display:block}[data-wptds-carousel][data-default]
[data-wptds-carousel-control][data-direction="start"]>svg{transform:scaleX(1)}[data-wptds-carousel][data-default]
[data-wptds-carousel-control][data-direction="end"]>svg{transform:scaleX(-1)}[data-wptds-carousel][data-default]
[data-wptds-carousel-control][aria-disabled="true"]{visibility:hidden;cursor:not-allowed}[data-wptds-carousel][data-default]
[data-wptds-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-wptds-carousel][data-default]
[data-variant="Normal"],[data-wptds-carousel][data-default][data-variant="FullWidth"]{--wptds-carousel-control-opacity:0}[data-wptds-carousel][data-default]
[data-variant="Normal"]:has([data-wptds-carousel-scroll-container]:focus-visible),[data-wptds-carousel][data-default][data-variant="Normal"]:has([data-wptds-carousel-control]:focus-visible),[data-wptds-carousel][data-default][data-variant="FullWidth"]:has([data-wptds-carousel-scroll-container]:focus-visible),[data-wptds-carousel][data-default][data-variant="FullWidth"]:has([data-wptds-carousel-control]:focus-visible){--wptds-carousel-control-opacity:1}[data-wptds-carousel][data-default]

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a-default][data-variant="Normal"][data-snap] [data-wptds-carousel-scroll-container]{ scroll-snap-type:x
proximity }[data-wptds-carousel][data-default][data-variant="Normal"][data-snap]
[data-wptds-carousel-item]{ scroll-snap-align:center;scroll-snap-stop:always }[data-wptds-carousel][data-defau
lt][data-variant="Normal"][data-snap]
[data-wptds-carousel-item]:first-of-type{ scroll-snap-align:start }[data-wptds-carousel][data-default][data-variant="Normal"][data-snap]
[data-wptds-carousel-item]:last-of-type{ scroll-snap-align:end }[data-wptds-carousel][data-default][data-variant="FullWidth"]
[data-wptds-carousel-scroll-container]{ scroll-snap-type:x
mandatory }[data-wptds-carousel][data-default][data-variant="FullWidth"]
[data-wptds-carousel-item]{ inline-size:100%;scroll-snap-align:center;scroll-snap-stop:always }[data-wptds-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
 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}#slideexp3_445DFB .slide {
 margin-right: 8px; }#slideexp3_445DFBc .b_slidebar .slide { border-radius: 6px; }#slideexp3_445DFB
 .slide:last-child { margin-right: 1px; }#slideexp3_445DFBc { margin: -4px; } #slideexp3_445DFBc
 .b_viewport { padding: 4px 1px 4px 1px; margin: 0 3px; } #slideexp3_445DFBc .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_445DFBc .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_445DFBc .b_slidebar .slide.see_more
 .carousel_seemore { border: 0px; }#slideexp3_445DFBc .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 Wind Turbine
 Generator AssemblyWind Turbine AssemblyWind Turbine Generator PartsWind Turbine Generator
 ComponentsWind Turbine Generator StructureWind Turbine Generator Parts DiagramStructure Of Wind
 Turbine GeneratorWind Turbine Generator SystemGenerator Of A Wind TurbineWind Turbine Generator
 DesignWind Turbines | Encyclopedia MDPIWind turbine assembly - 3D model of the wind turbine assembly
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 John Gemmill blogAssembly of a Wind Turbine Generator for Green Electricity Production ...How to
 Assemble a Wind Turbine | Airpes Lifting SolutionsAssembly of an Enercon E-138 wind turbine, the stator,
 part of the ...A New Zero Waste Design for a Manufacturing Approach for Direct-Drive ...See
 all.sb_doct_txt{color:#4007a2;font-size:11px;line-height:21px;margin-right:3px;vertical-align:super}.b_dark
 .sb_doct_txt{color:#82c7ff}nau [PDF]Assembly Manual - The College of Engineering, Informatics, and
 ...Bolt Yaw Fin Mounts to Yaw Fins. Install Generator assembly and Yaw Fins to Top Nacelle using the four
 Yaw Fin Mounting bolts to attach all three components. Attach Linear actuator mounts to the top ...

Bolt Yaw Fin Mounts to Yaw Fins. Install Generator assembly and Yaw Fins to Top Nacelle using the four
 Yaw Fin Mounting bolts to attach all three components. Attach Linear actuator mounts to the top ...

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The coils are all wired together to increase the power, and the wires carrying the current are routed through the shell of the generator to be sent to the next system.

The major components of a wind turbine include the gearbox assembly, aerodynamic braking system, turbine generator, and electrical power transmission systems. The turbines are ...

A pre-made generator will be the easiest option for beginners, but tutorials can be found to make your own by searching the internet for "making a wind turbine generator."

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