



Cpcnf uki'qhl'cf xcpwi gu'cpf 'f kucf xcpwi gu''  
qhl'qr gt cvkqpcn's wcrkyl 'qhl'qdl gew' \$i t ggp 'dwrkf lpi \$'

° Article No  
Vol. ), 2

" " " " " " " " /  
" "\$ " "\$0'  
" "<"ë " ì." ." /  
" " " " 0'  
" "<" " ." " " 0' 0' " "\$ "

\$'1l' T waukcp 'Lqwtpcn'qh'Eqputwekqp 'Uekpeg'cpf 'Vgej pqmji { 00'424600' 0320'  
"306322322800' F QK3207: 48 lt leu0424600280"

**What is "Green Bu¥¥£**

Uwaukpcdnrg" f gxrqr o gpv" cpf " i tggp"  
geqrni { "j cxg" dgeqo g" y q" vgo u" qh' uqekn'  
eqpegrp0 Vj g" eqo o qp" vj go g" qh' o cprkpf "  
kp" vj g" 43uv' egrwt { "ku" uwaukpcdnrg" f gxrqr /  
o gpv0 Hqt" wtdcp" eqputwekqp. " kv" ku" cnuq"  
pgeguuct { "vq" vj kv' hqo " vj g" tcf kqpcn' j ki j /  
eqpuwo r vkqp" f gxrqr o gpv" o qf gn' vq"  
cp" ghlekpv" i tggp" f gxrqr o gpv" o qf gn0'  
oi tggp" dwrkf lpi uo" ctg" vj g" qpn { "y c { "vq" ko /  
r rgo gpv" vj ku" vcpuhqto cvkqp" cpf " ctg" vj g"  
f gxrqr o gpv" qh' ctej kgewt g" kp" vj g" y qtrf "  
vqf c { "kpgxkcdrg" t gpf "]3.4.0'

C" oi tggp" dwrkf lpi o" ku" c" dwrkf lpi " vj cv"  
o czko k gu" vj g" eqpugtxcvkqp" qh" tguqwtegu"  
\*gpgti { ." rcpf. " y cvgt" cpf " o cvgtken" r tq/  
vgeu" vj g" gpuktqpo gpv" cpf " tgf wegu" r qmw'  
vkqp" vj tqwi j qw' vj g' rkg" e { eng" qh' vj g' dwrkf /  
lpi . " cpf " r tqxf gu" r gqr rg" y kj " c" j gcnj { . "  
uwkcdrg" cpf " ghlekpv" wug" qh' ur ceg. " rkkpi " "  
kp" j cto qp { "y kj " pcwt g0'

Vj g" y j qrg" rkg" e { eng" qh' c" dwrkf lpi " tg/  
hgtu" vq" vj g" y j qrg" r tqeguu" kpenmf lpi " o cvg/  
tkn' r tqf wekqp. " r rppkpi . " f guki p. " eqp/  
utwekqp. " qr gtcvkqp" cpf " o ckpgpcpeg. "  
f go qrkqkp. " tgwug" cpf " f kur qucn' qh"  
vj g" dwrkf lpi 0'

F wg" vq" i gqi ter j kecn" eqpegr wcn" geq/  
pqo le. " vgej pqmji kecn' cpf " ewawten' f khtg/  
gpegu. " vj gtg" ku" pq" eqpugpuwu" qp" vj g" r tgekug"  
f ghpkkqp" qh' oi tggp" dwrkf lpi o" cv" j qo g"  
cpf " cdtqcf 0' Qp" vj g" qv' gt" j cpf. " cu" oi tggp"  
dwrkf lpi o" r tcevegu" geqrni kecn' ekxkk' cvkqp"  
cpf " uekpvkhe" f gxrqr o gpv" eqpegr v.  
ku" eqppqcvkqp" cpf " gz vepukqp" ctg" gz vgo gn'  
tlej " cpf " ctg" gxqkxkpi " cmqi " y kj " vj g" r tq/  
eguu" qh" j wo cp" ekxkk' cvkqp" y kj qw" cp { "  
gzj cwukqp. " vj wu" r wtukpi " c" uq/ ecngf "

y qtrf / tgeqi pk gf " eqpegr v' qh' oi tggp" dwrkf /  
lpi o" ku" qh' rkwrg' r tceveken' uki pkhecepeg0'

Cu" c" o cvgt" qh' hcev. " rknrg" o cp { " qv' gt"  
eqpegr wu. " r gqr rg" ecp" wpf gtucpf " vj g" guugp/  
vkn' ej ctcevtkukau" qh' oi tggp" dwrkf lpi o"  
hqo " f khtg gpv" vo g" cpf " ur ceg" cpf " hqo "  
f khtg gpv" r gtur gevkgu0' Vj g" tgcikv { " ku"  
vj g" uco g0' Vj gtg" ctg. " qh' eqwtug. " uqo g" dcule"  
eqppqcvkqp" vj cv' ctg" tgeqi pk gf " y qtrf /  
y kf g0'

oi tggp" dwrkf lpi uo" ctg" wuwcm { " tgeqi /  
pk gf " d { " vj g" y qtrf " cu" j cxkpi " cv" rguv'  
vj g' hqmj lpi " vj tgg" dcule" eqppqcvkqp0'

**3+Gpxk qpo gpw' neqpujxcvkqp0**

Eqpugtxcvkqp" cpf " gpuktqpo gpv' r tq/  
vgevkqp" ku" vq" tgs vktg" r gqr rg" kp" vj g" y j qrg"  
r tqeguu" qh' eqputwekpi " cpf " wukpi "  
vj g" dwrkf lpi " vq" o czko k g" vj g" eqpugtxcvkqp"  
qh' tguqwtegu" \*gpgti { " ucxkpi . " rcpf " ucxkpi . "  
y cvgt" ucxkpi . " o cvgtken' ucxkpi + " r tqvge'  
vj g" gpuktqpo gpv. " ectg" hqt" vj g" geqrni { " cpf "  
tgf weg" r qmwkqp. " cpf " tgf weg" vj g" mcf " cpf "  
ko r cev" qp" vj g" gctv' ju" tguqwtegu" cpf "  
vj g" gpuktqpo gpv' ecwugf " d { " vj g' eqputwekqp"  
cpf " wug" qh' j wo cp" cevkkkku" qp" vj g' dwrkf lpi "  
vq" vj g" o kpo wo " cpf " vj g" geqrni kecn' tge { /  
enki " ecr cekv 0'

Y g" wuwcm { " ecm' dwrkf lpi u" vj cv' ctg" f g/  
uki pgf " cpf " eqputwev' kp" ceeqtf cpeg" y kj "  
gpgti { / ghlekpv' f guki p" ucpf ctf u" vq" tgf weg"  
gpgti { " eqpuwo r vkqp" f wtkpi " wug0' Vj ku"  
o gcpu" vj cv' c" oi tggp" dwrkf lpi o" tgs vktg" vj cv'  
kv" ku" cnuq" cp" gpgti { / ghlekpv' dwrkf lpi 0'  
J qy gxgt. " gpgti { / ghlekpv' dwrkf lpi u" ecp/  
pqv' dg" uko r n' " gs wcv' y kj " oi tggp" dwrkf /  
lpi uo0'

**4+J gcnj { 'cpf 'Eqo hqtwdrg0**

Etgevkpi " c" j gcnj { " cpf " eqo hqtwdrg" rkk/  
lpi " cpf " y qtnkpi " gpuktqpo gpv' ku" qp" qh"  
vj g" dcule" tgs vktg" go gpw' hqt" r gqr rg" vq" eqp/

utwev" cpf "wug" dwkf lpi u0' K' ku" vq" r tqxf g" r gqr ng" y kj " c" j gcnj { . " uwkcdrg" cpf " ghk/ ekpv'cevkkk\ 'ur ceg0

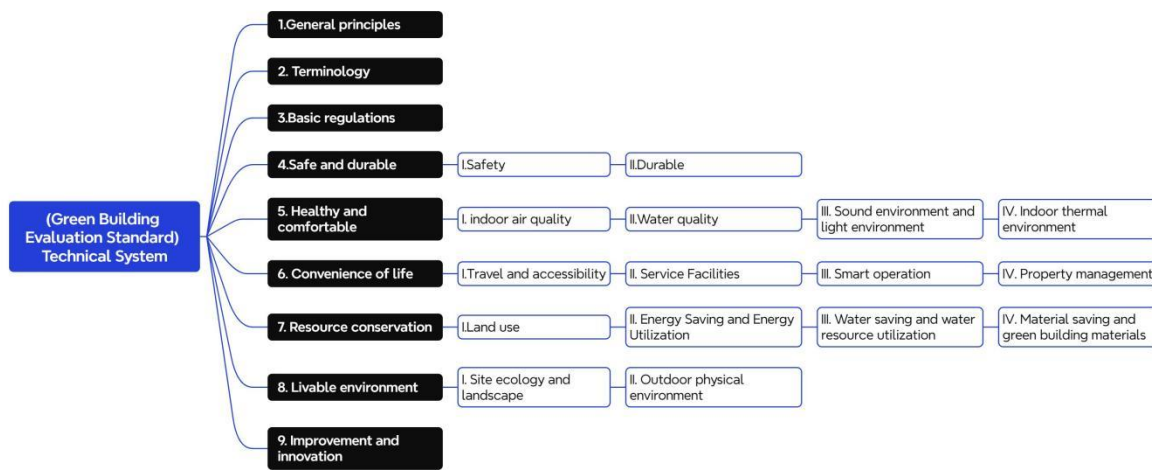
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P cwten!j cto qp{ "ku" vq" tgs wktg" r gqr ng" kp" vj g" eqputwevq" cpf "wug" qh' dwkf lpi u" lp" vj g" y j qrg" r tqegu. "emug" vq. "ectg" cpf "ectg" qh' r gqr ng" cpf " dwkf lpi u" lp" vj g" pcwten! geq/ nqi kecn! gpxkqpo gpv. " y kni npqy " vj g" y qtrf . " cf cr v' vq" vj g" y qtrf . "ectg" hqt" vj g" y qtrf " cpf " vtcpuhqto " vj g" y qtrf " qh" pcwten! j cto qp{ " cpf " r gceg" qh' o kpf " kp" wplv\ . " uq" vj cv' r gqr ng. " dwkf lpi u" cpf " pcwtg" eqgzku" j cto qplqwun\ 0' Qpn\ " kp" vj ku" y c\ " ecp" y g" eqpukf gt" cpf " eq/ qtf kpcv\ vj g" geqpqo le" dgpghku. " uqekn! dgp/ ghku" cpf " gpxkqpo gpvcn! dgpghku= " kp" qtf gt" vq" cej kxg" vj g" pcvqpcn! geqpqo { . " j wo cp" uqekv\ " cpf " vj g" geqmi kecn! gpxkqpo gpv' kp" c" i qqf " cpf " hcuv' uwuckpcdrg" f gxgnr o gpv0

Dgecwug" qh' vj g" cdqsg" eqppvcvq. " uqo g" r gqr ng" ecm' oi tggp" dwkf lpi o" cu" gpxk/ tqpo gpvcn' r tqvevq" dwkf lpi . " geqmi kecn' dwkf lpi " qt" uwuckpcdrg" dwkf lpi 0"

Vj gtghqtg. " y j cv' y g" wpf gtucpf" d{ " oi tggp" dwkf lpi o" ku" c" nkp' qh' o wnkf ko gp/ ukqpcn! tggp" r j { ukecn! ecttktg" eqputwevq" d{ " r gqr ng" vq" o czko k' g" tguqwtg" eqputxvq" cpf " gpxkqpo gpvcn! htkpfrkpguu" kp" vj g" y j qrg" rtkg" e{ eng" hqt" r gqr ng" vq" r kxg" kp" r gceg" cpf " wug0 vj g" ng{ " tgcup" y j { " oi tggp" dwkf / lpi o" ku" f khtg' gpv' hqo " vtcf kkpvcn! dwkf lpi " ku" vj cv' k' utguugu" vj cv' vj g" dwkf lpi " ku" pq" hqi gt" kuqrvqf . " ucvk" cpf " r vtgn\ " vj g" dwkf lpi " kv/ ugrh" dw' c" eqo r tgi gpukxg. " cm/ gpeqo r cuuki . " cm/ gpeqo r cuuki . " wplxgt/ ucm\ " eqppgevgf . " o qxkpi . " ej cpi kpi " cpf " eqpuvcv\ " gxqkpi " o wnk' hcevgf " i tggpki " r j { ukecn! ecttktg" ]5. '6\_0

Y g' j cxg' f gxgnr gf " gxcnwvq" etkgtk" hqt" oi tggp" dwkf lpi uo. " y j lej " kpenf g" i gp/ gtcn' r tkpek' ngu. " vto kpmi { . " dcuk" tgi wnc/ vqpu. " uchv\ . " j gcnj " cpf " eqo hqtv. " eqpxgp/ kpeg" qh' rtkg. " wug" qh' tguqwtg. " gpxkqpo gpv' cpf " kppqxcvq0\* Hk 03+



Hk 030I tggp" dwkf lpi " gxcnwvq" ucpcf ctf u0\* Rlewtg" cwj qt' Ej gp' l cpi { cpi +"

° Yzsaosges and dYsYzaosQ -

Vj g" eqpegr v' qh' oi tggp" dwkf lpi o" ecp/ pqv' dg" cwtkdwgf " vq" c" hwpf co gpvcn\ pgy " f kgevq" kp" ctej kgewtcn" eqputwevq. " wtdcp" r nppkpi " cevkkkgu. " cu" y gm' cu" uwu/ vckpcdrg" vgttkqtkcn' f gxgnr o gpv0 Kuwgu" clo gf " cv' uqkpi " vj g" j cto qplqwun\ kpvgtce/ vq" qh' vj g" ctvkecn! gpxkqpo gpv' y kj "

vj g" uwttqwpf lpi " pcwten! ur ceg" y gtg" eqp/ ucpcv\ " eqpukf gtgf " kp" vj g" r cuv' cpf " hqwpf . " vq" qpg' f gi tgg' qt" cpqj gt. " c" r tcevekn! ghgevq" o f gr gpf lpi " qp" vj g" uqekn! cpf " vej plecn/ vej pqmi kecn' ucvg" qh' gcej " ur gekke" j kvqtk/ ecn! gtc0

Cu" c" tguwn' qh' vj g" eqo r rvgf " kpf wutken' r gtkqf " qh' f gxgnr o gpv' cpf " vj g" r tqegu"

qh'wt'cprk'cvkqp."r'qdr'go'u"cuuqek'cvf"y'kj" vj'g'hqm'y'kpi'j'cxg'uj'ctr'n'q'ytug'p'gf'<'  
 ó' r'quuk'drg"uj'qt'vci'g"qh'tg'p'gy'cdrg"tg/ uq'vte'gu="

ó'c"uki'pk'he'cpv'tgf'wekqp"kp'ct'gcu"qh'vj'g' r'nc'p'gw'u'w'ht'ceg'u'w'k'cdrg'hq't'rhg="

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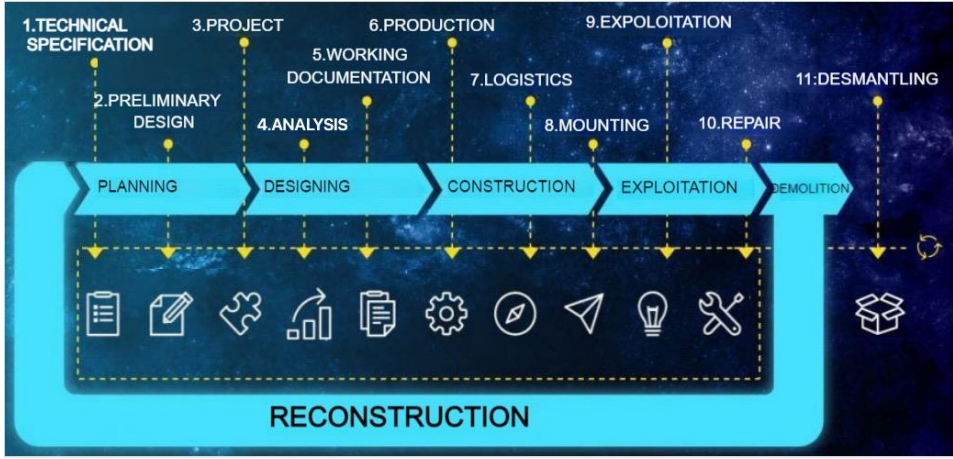
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ó'u'q'ek'n'f'g'o'c'p'f'u'h'q't'v'j'g'h'q't'o'c'v'k'q'p'q'h'c' eq'o'h'q't'v'cd'rg'c'p'f'u'c'h'g'ur'ceg'o'

Vj'g'rh'k'v'g'f'ek't'ew'o'uc'p'eg'u'f'v'g't'o'k'p'g'v'j'g" o'c'k'p'r't'g't'g's'w'k'v'g'u'c'p'f'u'ec'rg'q'h'c'r'r'k'ec'v'k'q'p' qh'oi'tggp'dwkrf'kpi'ö'

Vj'g'r'gew'k'ct'k'v'{"qh'o'qf'g't'p'k'f'g'cu'cd'q'w'v' vj'g"q'ti'c'p'k'cvkqp"qh'c'tej'k'g'ew't'cn'ur'ceg" ku'g'z'r't'g'u'ug'f'd{"v'j'g'i't'c'f'w'cn'dw'e'q'p'v'k'p'w'q'w'u" k'p'x'q'r'k'g'o'g'p'v'qh'v'j'g'r't'k'p'ek'r'ng'u"qh'oi'tggp" dwkrf'kpi'ö'kp'c'tej'k'g'ew't'cn'c'p'f'eq'p'ut'we'k'q'p' \*k'p'x'g'u'o'g'p'v'c'p'f'eq'p'ut'we'k'q'p'+c'ev'k'k'k'g'u" ]7.'8\_0'

Vj'g'i'g'p'g'uku'q'h'v'j'g'v'g't'o"oi'tggp'dwkrf/ k'p'i'ö'ec'p'dg'ej'c't'ce'v'g't'k'g'f'cu'v'j'g'v'c'p'uh'q't/ o'c'v'k'q'p'qh'u'q'o'g'k'p'k'k'c'm'f'g'z'em'u'k'x'g'n'f'g'eq/ p'q'o'le'ec'v'g'i'q't{"qh'cu'g'gu'o'g'p'v'q'h'c'ec'r'k'cn' eq'p'ut'we'k'q'p'r't'q'l'g'ev'k'p'v'q'c'u'f'v'g'o'qh'k'p'f'k' ec'v'q'tu'ej'c't'ce'v'g't'k'k'p'i"v'j'g'h'g'c'w't'g'u"qh'v'j'g" h'q't'o'c'v'k'q'p'qh'v'j'g'q'r'g't'c'v'k'q'p'c'n's'w'c'r'k'f'qh' eq'p'ut'we'k'q'p'r't'q'f'w'eu'c'v'c'm'u'c'i'g'u"qh' v'j'g'rh'g'e'f'eng'\*H'i'04+'



**H'i 040** Vj'g'o'c'k'p'u'c'i'g'u'q'h'v'j'g'rh'g'e'f'eng'q'h'h'q't'o'k'p'i'v'j'g's'w'c'r'k'f'qh'eq'p'ut'we'k'q'p'r't'q'f'w'eu']9\_< \*V'c'p'ur'c'v'q't'E'j'g'p'l'c'p'i'f'c'p'i'+

C"ng'{"cur'ge'v'eq'p'v'k'dw'k'p'i"v'q"v'j'g'h'q't/ o'c'v'k'q'p'c'p'f'f'g'x'g'r'q'o'g'p'v'qh'k'f'g'cu."i'q'c'm' c'p'f'q'd'l'g'ev'k'g'u'q'h'oi'tggp'dwkrf'kpi'ö'j'cu'dg/ eq'o'g'v'j'g'eq'p'eg'r'v'q'h'v'j'g'h'g'c'uk'd'k'v'f'q'h'u'q'r'k/ k'p'i"ku'w'g'u"qh'g'p'u'w't'k'p'i"v'j'g"s'w'c'r'k'f'qh' v'j'g'c'tej'k'g'ew't'cn'g'p'x'k'q'p'o'g'p'v'd{"c'f'c'r'v'k'p'i" v'j'g'h'q't'o'g'f'c't'v'k'ek'n'h'q't'o'c'v'k'q'p'u"kp'f'k'k'f'w'cn' dwkrf'kpi'u."u't'w'ew't'g'u."v't'd'c'p'r'nc'p'p'k'p'i" h'q't/ o'c'v'k'q'p'u."v'g't't'k'q't'k'g'u"v'q"r'quuk'drg"ej'c'p'i'g'u" k'p"v'j'g'uc'v'g'q'h'v'j'g'p'c'w't'cn'g'p'x'k'q'p'o'g'p'v'ó' k'p"eq'p'f'k'k'q'p'u"qh'eq'p'v'k'p'w'q'w'u"f'g'et'g'c'ug"k'p" v'j'g'c'x'c'k'r'd'k'k'v'q'h'eq'p'uw'o'g'f't'g'u'q'v't'eg'u'

Vj'g'o'c'k'p'w'c'm'c'p'f'w'c'ti'g'v'h'p'ev'k'q'p' qh'oi'tggp'c'tej'k'g'ew't'g'o'ku'v'q'h'w'n'f't'g'f'w'eg" v'j'g'ng'x'g'n'qh'eq'p'uw'o'g'f't'g'u'q'v't'eg'u'<g'p'g'ti'{" c'p'f'o'cv'g't'k'cn'g'p'g'ti'{"g'h'h'ek'p'e'{"r't'q'r'g't'v'f'+ cu'y'g'n'f'cu't'g'f'w'eg'v'j'g'p'g'i'c'v'k'g'g'p'x'k'q'p'o'g'p/

cn'ko'r'cev'q'p"v'j'g'g'p'x'k'q'p'o'g'p'v'g'p'x'k'q'p/ o'g'p'v'cn'k'k'p'f'k'p'g'u'u'r't'q'r'g't'v'f'+]:.:'\_0'

Vj'g'et'k'g't'k'q'p'h'q't'et'g'c'v'k'p'i"q't'k'p'et'g'c'uk'p'i" v'j'g'g'p'g'ti'{"g'h'h'ek'p'e'{"q'h'c'ec'r'k'cn'eq'p'ut'we/ v'k'q'p'r't'q'l'g'ev'ku'd'g'eq'o'k'p'i"q'p'g'q'h'v'j'g'o'q'u'v' u'k'i'p'k'he'cp'v'k'p'f'k'ec'v'q'tu"qh'q'r'g't'c'v'k'q'p'c'n'g'h'h'k' ek'p'e'{"q't"q'r'g't'c'v'k'q'p'c'n's'w'c'r'k'f'qh'eq'p'ut'we/ v'k'q'p'r't'q'f'w'eu'0'E'w't't'g'p'v'f'."v'j'g'eq'p'eg'r'v'q'h' g'p'g'ti'f'g'h'h'ek'p'v'c'p'f'g'p'x'k'q'p'o'g'p'v'c'm'f' h'k'g'p'f'n'v'ej'p'q'm'i'k'g'u."o'cv'g't'k'cn'c'p'f'ut'we/ w't'g'u"k'p'v'g'p'f'g'f'h'q't'v'j'g'h'q't'o'c'v'k'q'p'qh'ö'u'w/ v'k'p'c'd'rg'c'tej'k'g'ew't'g'o'q'd'l'g'ew'u'ku'd'g'k'p'i"ko / r'ng'o'g'p'v'g'f'k'p'c'tej'k'g'ew't'cn'c'p'f'eq'p'ut'we'k'q'p' c'ev'k'k'k'g'u'k'p'v'j'g'h'q'm'y'k'p'i"o'c'k'p'c't'g'cu"]32\_<

Á'k'p'v'g'n'k'i'g'p'v'dwkrf'kpi'="

Á'ö'r'cu'k'x'g'dwkrf'kpi'ö="

"	"	"	"	"	"	"	Статья №
"	"	"	"	"	"	"	Том ) 2
		\$"			\$		

ó ðevxgö"gpgti {/ghlekpvdwkrf lpi "ce/  
vkg"dwkrf lpi ="

Adwkrf lpi " y kj " | gtq" gpgti { " equuwo r/  
vqp"pgv| gtq"gpgti { "dwkrf lpi ="

Adwkrf lpi "qh'dlqerko cve"ctej kgewtg0'

ðGeqmi lecnö" cpf " ðgpgti { " ghlekpvo"  
kppqxcvqpu." y j lej " hqto " vj g" dcuku" hqt"  
vj g"hqto cvkqp"qh'vj g"qr gtcvqpcn's wcrkv "qh"  
vj g"cdqyg" v r gu" qh' ðuwvckpcdng" ctej kge/  
wtgö"qdlgeu."ctg"ko r ngo gpvgf "cv'cm'uci gu"  
qh'vj g"rhg"e {erg" \*Hki 04+"cpf "ctg"vngp"kvq"  
ceeqpvp" gxgp" chgt" vj g" f go qrkvqp" qh"  
vj g"dwkrf lpi ."cu'c'uwdlgev'dcuku' hqt'vj g'tgwug"  
qh' dwkrf lpi " o cvgtknu" cpf " utwe/  
wtgu"j33."34\_0'

Vj wu." kp" vj g" eqwtug" qh' ko r ngo gpvki "  
vj g" eqpegr v' qh' ði tggp" dwkrf lpi ö" kp"  
vj g"o qf gtp"ugpug."k'ku"pgeguuct { "vq"cr r n"  
c" u{ungo cve." kvgtf kvkr r pct { " cr r tqcej ."  
y j lej "kpenf gu"pqv'qpn { "uqrvkpi "vj g"r tqd/  
ngo "qh'gpgti { "ghlekppe { "cpf "o kpk k lpi "  
gpvktqpo gpvneqpuqs vgepegu."dw'cnuq"r tq/  
egf wtgu'tgrvgf "vq"vj g"ghgevxg"ko r ngo gp/  
cvkqp"qh'qti cpk cvkqpcn'cpf "vgej pqmji lecn'  
uqrvkqpu." vj g" hqto cvkqp" cpf "o ckpvcklpi "  
vj g" guvcdkuj gf " r tco gvgtu" qh' hwpevqpcn'  
cpf "vgej pqmji lecn' r tqeguugu" cpf "rhg" r tq/  
eguugu0'

F gur kvg" vj g" hckn { " qdxkqu"cf xcpvci gu"  
qh' vj g" eqpegr v' qh' ði tggp" dwkrf lpi ö." vj g"  
eqpucpv'cpf "eqpvkpwqu" \*qp" c" y kf g" i gq/  
i tcrj lecn'uecng" +i tqy vj "qh' r tcevecn'gzco /  
r ngu" qh' vj g" hqto cvkqp" qh' gpgti { /ghlekpvp'  
cpf "gpvktqpo gpvcm { " htkpfn { " ecr kcn' eqp/  
utwevqpp" r tqlgeu" hqt" xctkqu" hwpevqpcn'  
r wtr qugu." vj g" r tqegu" qh' f gxgnr o gpv' qh'  
uwvckpcdng" ctej kgewtg"ku"cee qo r cpkgf "d { "  
c"pwo dgt"qh'eqpegr wcnr tqdngo u"j35."36\_0'

Vj g"htuv"cpf "o quv'uki phlecpv'r tqdngo "  
ku" vj g" j k j " ecr kcn' equu" qh' eqputwevqpp0'  
Vj g"wug"qh'kppqxcvkg"o cvgtknu."utwewtgu"  
cpf " eqputwevqpp" vgej pqmji lgu" kpgxkcdn { "  
ngcf u"vq"uki phlecpv' hpcpekn'cpf "mji kulecn'  
equu0' J k j " qr gtcvqpcn' s wcrkv { " cpf ." ce/  
eqtf lpi n { ."mij " o ckvpgpepeg" equu" cpf "tg/  
uqwtg" equuwo r vqp" ecp "lwvkh { " vj g" kpkkn'  
equu"qxgt"vko g."dw'k'ku"vj g" hpcpekn'tknu"

vj cv'ctg"vj g"o quv'ko r qtvcpv'hcevqt"cee qo /  
r cp { lpi "ði tggp"dwkrf lpi ö0'

Vj g" pgzv' o quv' ko r qtvcpv' hcevqt" ku"  
vj g" kpetgcugf " ngxgn' qh' tgs vktgo gpw" hqt"  
vj g" npqy ngf i g" cpf " eqo r gvpekgu" qh' ur g/  
ekrkuv" kpxqkngf " kp" vj g" f gxgnr o gpv' cpf "  
ko r ngo gpvckqp" qh' f guki p" uqrvkqpu0' Hqt"  
gzco r ng. " c" o qf gtp" ctej kgev" ku" tgs vktgf "  
vq" j cxg" c" o vej " dtqcf gt" cpf " f ggr gt" ngxgn'  
qh'npqy ngf i g" cpf " unkm. "dqj "kp" vj g" r wtgn { "  
ctej kgewtcn' cpf " eqputwevqpp" hkrf ." cpf "  
kp" ur gekhke "ctgcu" qh' npqy ngf i g" vj cv' i q' dg/  
{ qpf "vj g" ueqr g" qh' vj ku' r tqhguvqpcn' ucpf /  
ctf "dw'ctg" cduqngn { " pgeguuct { "vq"cej kvxg"  
vj g" guvcdkuj gf " s wcrkv { " kpf kecvqtu" qh' eqp/  
utwevqpp" r tqf wewu0' Qh' r ctvewrct" ko /  
r qtvcpv" ku" vj g" ghgevxgpguu" qh' vj g" hqt/  
o cvkqp" cpf " eqpf kvkqpu" qh' kvgtcevkqp" dg/  
vy ggp" ur gekrkuv" hqto lpi " c" vgo r qtct { " etg/  
cvxg" vgo "qh' cp" kpxguo gpv' cpf " eqputwe/  
vqp" r tqlgeu0'

F gur kvg" vj g" f gxgnr o gpv' qh' c" hckn { "  
rcti g" pwo dgt" qh' uelgpvkhke" cpf " vj gqtgvlecn'  
y qtmu" cpf " gzr gtko gpvni uwf lgu." vq" f cvg"  
vj g" ku" pq" xgtkhgf " o gvj qf qmji { " hqt" ctej k'  
vewtcn' cpf " eqputwevqpp" f guki p." y j lej "  
kpenf gu" c" tcvqpcn' cri qtkj o " hqt" uqrvkpi "  
wtdep" r rppkpi . " hwpevqpcn' r rppkpi . " eqp/  
utwevkg. "geppqo le" cpf " cguy gve" r tqdngo u"  
vj cv' y kni' ngcf " vq" vj g" cej kvxgo gpv' qh'  
vj g" tgs vktgf " r gthqto cpeg" kpf kecvqtu" ði tggp"  
dwkrf lpi ö" r tqlgeu0'

«a öe - 3a

Vj ku" ctveng" r tguvpu" vj g" tguvnu" qh'  
cp" cpcn { uku" qh' vj g" ewtgpv' ej ctcevgtkueu" qh'  
vj g" ði tggp" dwkrf lpi ö" eqpegr v0'

Vj g" tguvnu" uqy " vj cv' ði tggp" dwkrf lpi ö"  
j cxg" vj g' hqmij lpi " qdxkqu" cf xcpvci gu"

30J k j / equv' r gthqt o cpeg

Tgugctej " eqphko u" vj cv' ði tggp" dwkrf /  
lpi uö" ecp" ucxg" o qtg" vj cp" vgp" vko gu"  
kpkkn' kpxguo gpv' vgp" { gctu" chgt" eqo r ng/  
vqp0' Vj g" kpxguo gpv' wtpctqwpf " r gkqf "  
tcpj gu' hqo "32"vq: 2" { gctu0'

Cp" ko r qtvcpv' ng { " hgewtg" qh' ði tggp"  
dwkrf lpi uö" ku" gpvktlpi " ghlekpvp" wug" qh' tg/  
uqwtg. " y j lej " cmij u" wugtu" vq" ucxg" o qtg"

*Cpcr'f uki'qhl'ef xcpwci gu'cpf 'f kucf xcpwci gu''  
qhl'qr gt c'vkqpcr'is wcrk'f 'qhl'qdl gew' \$i t ggp 'dwkrf kpi \$'*

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Vol. ), 2

d{ " tgf wekpi " qr gtcvkpi " cpf " o ckwgpcpeg"  
equu" uwej " cu" gpgti { . " y cvgt. " gve0' Y j krg"  
c"oi tggp" dwkrf kpi o"o c { "kpkkm { "equv'o qtg"  
vj cp" c" tgi wrct "dwkrf kpi . "vj g" equv'f khtgtppeg"  
ecp" wuwcm { "dg"o cf g'wr 'y kj k'p'506 { "gctuo'

Cr ctv'ltqo "vj ku. 'k'y kn'cnuq'uki p'k'kecpv/  
n { "kpetgcug"vj g"lpeqo g"qh'dwkrf kpi "qy pgtu"  
y j q" eqmgev' tgpv' ltqo " vj gk" dwkrf kpi u"  
cu"vj g { "y kn'j cxg"vq"ur gpf "rguu"qp"o ckwg/  
pcepg'cpf "gctp"o qtg0'

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ku"vq" ko r tqsxg"vj g" gpxktqpo gpv."kpenwf kpi "  
vj g"ck"vj cv'vj g'dwkrf kpi au'tgukf gpw'dtgc'vj g0'  
Tgukf gpw'rxk'kpi "kp"oi tggp" dwkrf kpi uo"gp'q { "  
dgwgt"j gcmj "f wg"vq"rguu"gzr quwtg"vq"ck"cpf "  
y cvgt'r qmwkqp0'

Hqt" gzco r rg." o quv' kpf qqt" r qmwcpwu"  
ctg" f wg"vq"vj g"o cvgtkcn" wugf "kp" f geqtcvkpi "  
cpf " eqputwekpi " dwkrf kpi u." kq0' ectr gw." r  
ckpw0' Dtgc'vj kpi " kp" vj gug" r qmwcpwu"  
ku"j cto hwn"vq"j gcmj "cpf. "qxgt"vko g."ceew/  
o wrw'kqp" qh" vj gug" r qmwcpwu" ecp" rgef "  
vq"ugt'kquw"j gcmj "r tqdrgo u"uwej "cu" f k'k'lewa/  
v { "dtgc'vj kpi 0'

Qp" vj g" qv'j gt" j cpf. " r gqr rg" r'k'k'kpi "  
kp" oi tggp" dwkrf kpi uo" gp'q { " dgwgt" j gcmj "  
f wg"vq"vj g"uchgv { "qh"vj g"dwkrf kpi "o cvgtkcn0'

*50K0 rtqxs'gpgti { "gh'kekgpe {*

Y cvgt" cpf " gpgti { " gh'kekgpe { " ctg" qpg"  
qh"vj g" dki i guv'cf xcpwci gu'qh"oi tggp" dwkrf /  
kpi uo" o" gpgti { " gh'kekgpe { " ecp" tgf weg"  
vj g" wug" qh" eqcn" cp" ko r qtc'p'v' uqwtg"  
qh"grgevt'k'k'v { "kp"vj g'y qtrf 0'Vq"r t'gugtxg"vj ku"  
pcwtcn' t'guqwtg. "uqrc" r cpgnu" y gtg" kp/  
uvcngf "vq"j ctpguu"vj g'r qy gt"qh"vj g'uw'p0'

Vj g'f guki p"qh"vj g"dwkrf kpi "cnuq"cmqy u"  
gpqwi j "uwp'ri j v"vq"gpvgt"vj tqwi j "vj g'y kp/  
f qy u."cxqkf kpi "vj g" wug"qh"ct'v'k'k'k'cn' rki j v'  
kpi . "vj wu'ucxkpi "o qtg"gpgti { 0'Gh'kekgpv" wug"  
f qgup'v' uqr "cv"gpgti { =y cvgt"ku" cnuq" wugf "  
gh'kekgpvw { "vq" tgf weg" y cuvg0' Hqt" gzco r rg." y  
cvgt" wugf "kp" n'k'ej g'pu" cpf "dc'vj tq'qo u" ku"  
h'ngt'gf "cpf "t'gcv'gf "y kj "dk'q'h'ngtu"cpf "vj gp"  
wugf "vq"ktki cvg'i ctf g'pu0'

Rgqr rg" ecp" cnuq" tgf weg" y cvgt" eqp/  
uwo r vkp"d { "wukpi "pgy "vgej pqmji kgu. "t'gwu/  
kpi "y cvgt"cpf "eqmgev'kpi "tckpy cvgt0'

*60Dgwgt 'gpxkt qpo gpv*

Ceeqtf kpi "vq"vj g"Y qtrf "J gcmj "Qti cp/  
k' c'vkqp. "ck" r qmwkqp" n'k'm'cdq'w'9" o k'k'k'p"  
r gqr rg" gcej " { gct0' \*Hki 0'5+ "Vj gug" ucv'k'k'eu"  
qpn { "uj qy "j qy "dcf "qw" gpxktqpo gpv'j cu"  
dgeqo g" f wg"vq" ectdq" f kqz'kf g" go ku'k'k'pu."  
v'k'k'k'k'pu" qh" i cm'qpu" qh" w'p't'g'cv'gf " ugy ci g"  
dgkpi "t'g'nc'ugf "kp'vq" pcwtg. "cpf "o cp { "qv'j gt"  
v { r gu" qh" r qmwkqp0' oi tggp" dwkrf kpi uo" gh/  
h'ge'v'k'gn { "tgf weg" r qmwkqp" vj tqwi j "vj g" gh/  
h'ge'v'k'g" wug" qh" pcwtcn' t'guqwtg'gu0' Vj cv' ku. "  
tgf wekpi "ectdq" f kqz'kf g" go ku'k'k'pu"vq"j gr "  
uqy "vj g"tcv'g"qh'erko cvg"ej cpi g0' Hwt'v'j gt/  
o qtg. " oi tggp" dwkrf kpi uo" etgcv'g" c" dgwgt"  
gpxktqpo gpv'cpf "c"rguu" r qmwgf "y qtrf 0'K'  
cnuq" r tqo q'v'u" c" dgwgt" k'p'f qqt" gpxktqpo gpv'  
vj tqwi j "j gcmj kgt" k'p'f qqt" eqp'f k'k'k'pu"uwej "cu"  
rki j vkpi . "ck" s wcrk'v { . "gve0'

*70J ki j gt 'o ctngv'xcnwg*

oi tggp" dwkrf kpi uo" j cxg" j ki j " tgwtp"  
qp" k'p'x'guo gpv. "uqy "o ckwgpcpeg" equu" cpf "  
j ki j " o ctngv' xcnw'g0' Y j krg" tgpv' ku" ugv' cu"  
c" j ki j "xcnwg"kp"vj g't'gcn'gu'cv'g"o ctngv. "ucrg"  
xcnwg"ku"o wej "j ki j gt0'

*80Ucxg'y cvgt*

Kp" v'cf k'k'k'p'cn' dwkrf kpi u." qpg" qh"  
vj g" o quv' ugt'k'quw" y cu'gu" qh" pcwtcn' tg/  
uqwtg'gu"ku"vj g"y cuvg"qh" pcwtcn' tckpy cvgt0'  
Kp"oi tggp" dwkrf kpi uo. "ut'wewt'gu"ctg" wugf "vq"  
eqmgev'tckpy cvgt"cpf "ugy ci g0'

Vj ku" f g'x'leg" ucx'gu" y cvgt" hqt" ktki c'vkqp. "  
i ctf gp'kpi "cpf "v'k'k'v'hwuj kpi 0'Tckpy cvgt"ku"  
j c'x'g'ugf " vq" tgf weg" m'ecr'k' gf " h'q'q'f kpi . "  
vj g'gd { " tgf wekpi " y cuvg" gpv { " kp'vq" m'ecr'  
y cvgt" dqf k'gu"cpf "gt'q'k'q'p0'F t'k'x'gy c { u'o cf g"  
qh'u'q'rk'f "cpf "r q'q'w'u"o cvgtkcn'ecp"u'qr "y c/  
vgt" f co ci g'cpf "eqp'vco k'p'c'vk'q'p0'

*90Ru'f ej q'qi k'ec'nf q'vko k'j gf "*  
*gpxkt qpo gpv"*

oi tggp" dwkrf kpi uo" ctg" f guki pgf " vq"  
o ckw'v'k'p"vj g"gz'k'k'k'k'p' "gpxktqpo gpv'cpf "cnuq"  
ko r tqsxg"vj g'o gpv'cn'j gcmj "qh't'gukf gpw0' Cp"  
gzco r rg"y kn'k'm'w'ut'cv'g"vj g'r tqdrgo 0'Y j cv'  
uqwpf " y q'w'f " { qw' r'k'ng" vq" y cng" wr " vq" o"  
ej ktr kpi "dk'f u. 't'w'w'k'p' "h'g'c'x'gu. "ect"j q'p'u. "qt"  
c"m'w'f "p'q'k'ug'A"

oi tggp" dwkrf kpi uo" ctg" cnuq" f guki pgf "vq"  
r t'q'x'f g"qr vko cn' uqwpf "r t'gug'peg. "k'p'ew'f kpi "  
cr r tq' r t'k'v'g" uqwpf "k'p'u'w'v'k'q'p"cpf "ce'q'w'w'k'eu0'

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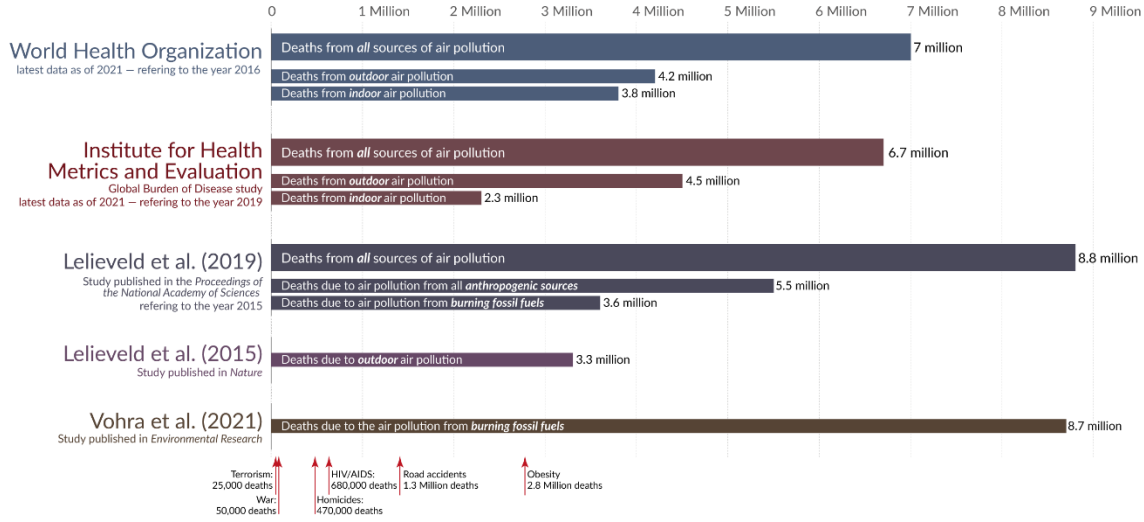
Hqt " v gug" tgcuppu." oi tggp" dwkf kpi uo" ctg" tgeqo o gpf gf " hqt" gf wecvkqpcn" vj gter gwle."cpf "tgukf gpvknr wtr quguo"

How many people die from air pollution each year?



Estimates of the global death toll from air pollution published in major recent studies

- 'All sources' includes both anthropogenic and natural sources:
• The largest source of natural air pollution is airborne dust in the world's deserts. Other natural sources are fires, sea spray, pollen, and volcanoes.
• Anthropogenic sources include electricity production; the burning of solid fuels for cooking and heating in poor households; agriculture; industry; and road transport.



Data on annual death tolls from other causes is the latest data from the World Health Organization, UCDP, and Global Terrorism Database as of November 2021. Licensed under CC-BY by the author Max Roser

Hh 050Y qtrf "J gcmj "Qti cpk cvkq"ucvkuu"qp"cppwcnf gevj u'f wg"vq"ckt'r qmwwkqp"]37\_

: ORt qvgev'v'j g'pcwt cn'gpxk qpo gpv
oi tggp" dwkf kpi uo" r tqvgev" vj g" pcwtcn'
j cdkcu"qh'rkxkpi "vj kpi u'vj tqwi j "vj gk"qr gt/
cvkqup0Vj ku" gxgpv'r tqo qvgu"j gcmj { "j cdku"
co qpi "tgukf gpw"uwej "cu"y cmkpi ."gz gtekug"
cpf "qvj gt'r j { ulecn'cevxkkguOK'cnuq"cwtevu"
dkf u'cpf "qvj gt"cpko cm."etgevkpi "cp"kpvg/
i tcvgf "gequ{ungo "vj tqwi j qw'vj g'ctgc0
F gur kvg"cm'ku"cf xcpvci gu."ku"r tcevekn'
ko r ngo gpwvkvq" tgs vkt gu" uqrkpi " eqo r ngz"
kpvgtf kuek rpkct { "kuwgu"tgrcvgf "vq<
30J ki j 'ecrkcn'lequ
F gur kvg" vj g" j ki j " tgwtpu" qxgt" vko g."
vj g'kpkkcn'kpxguvo gpv'tgo ckpu"c"o clqt "kuwg"
hqt"oi tggp" dwkf kpi uo0'Uqo g"r gqr ng"y cpv'
vq"rkxg"j gcmj kn { "dw"ecppqv'chqtft "vj g"kp/
vkn'eqputwekvq"equu0'
F gr gpf kpi "qp"j qy "o wej "gpxkqpo gp/
vcm { "hkpf n { "vej pqmji { " { qw"y cpv"vq"kp/
eqtr qtcvg"kvq" { qwt "dwkf kpi ."vj g"equv"ecp"
xct { "i tgcvt 0'
J qy gxgt." vj g" kpkkcn' kpxguvo gpv' tg/
o ckpu" j ki j " f wg" vq" vj g" wpcxckcdkxk { " qh'

vj g" tguqwtegu" tgs vkt gf "vq" eqput wev"oi tggp"
dwkf kpi uo0' Vj gtghqtg." vj g" j ki j " equv" qh'
oi tggp"dwkf kpi uo'y kn'dg"cp"kuuwg" { qw"j cxg"
vq "hceg"y j gp"o cmkpi "f gekukqu0'
K'y kn'dg"j gr hwn'vq"eqpukf gt "vj g"kpkkcn'
equv'qh'eqputwekpi "c"oi tggp"dwkf kpi o"cpf "
vj g"vcn'ucxkpi u'qxgt"vko g0'
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qh' gzr gt u' kpxqngf " kp" vj g" f gxgrqro gpv'
cpf "ko r ngo gpwvkvq"qh'f guki p"uqmwkqu"kp"
vj g'hgrf "qh'oi tggp"dwkf kpi \$"
Hqt "oi tggp"dwkf kpi uo."hkf kpi "r tqhgu/
ukqpcn"y j q"wpf gtucpf "dqy "vej pkecn'tg/
r cktu'cpf "kpkkcn'eqputwekvq"ecp"dg"c"ej cn'
ngpi g0' Vj ku" kpf wut { " ku" tgrcvkxgn { "pgy =
vj gtghqtg." { qw"o c { "j cxg" f khlwv "hkpf kpi "
gzr gtgpegf " y qtngtu" vq" j gr " { qw" uqrkkg"
eqo o qp"r tqdngo u'kp" { qwt "dwkf kpi 0'
50Napi gt 'eqput wekvq"vko g
Dwkf kpi " c" oi tggp" dwkf kpi o" vengu"
ouqo go" vko g0' Dghqtg" eqputwekvq." c" mv'
qh'y qtmi qgu"kvq"r rppkpi "cpf "f guki kpi 0'

