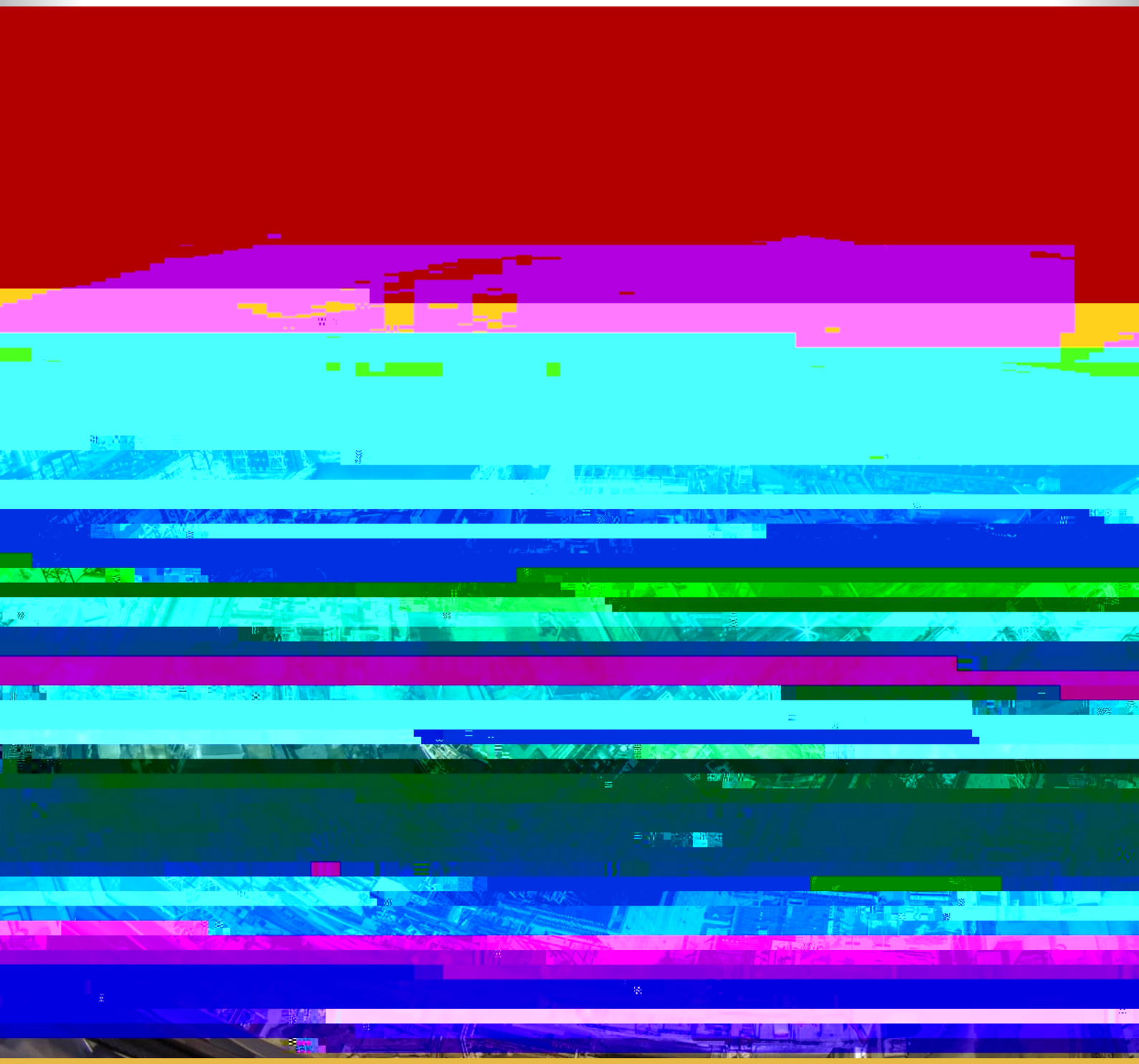
iter
china eu india japan korea russia usa

[redacted],
THE WAY TO NEW ENERGY



[redacted]

.ite .o g

[illegible] ("The Wa
designed to demonst ate the scienti c and technological feasibilit of f_ sion ene g .

WELCOME TO "in Latin) is THE MACHINE

The [illegible]e ice i at a a aR ia ac ea i g t ida cha be ith ag etic c i . T a a aet - ha ped f i de ice that e ede e ped i the ate 1950 a d 1960 i the S iet U i a d ic ad pted b tf i ab at ie th gh t the d.

I the pa t 50 ea , p g e i t a a ha bee a tead a d a pectac a a the g thi the pe f a ce f ic p ce i deed ight bette . Ke f i pa a ete ha ei c ea ed b a fact f 10 i i .

I the [illegible] a a , a 50/50 ga e i t e fh d ge i t pe de te i a d t iti i be heated t te pe at e i e ce f 150 i i Ct f a h t pa a. The f i eacti p d ced i e ea e f i i ti e ee e g tha the che ica eacti btai ed th gh the b i g f i ga .

Mag etic fie d c eated b a a a f gia t pe c d cti g c i a d a t g e ect ica c e t i ha pe a d c fi e the pa a, ee pi g ita a f the e e a .

The 23,000-t e [illegible] a a i be the age ta d t p e f f i achi e e e b it, ca pab e f ge e ati g at ea t 10 ti e ee e g tha it ta e t heat the pa a (Q 10). [illegible]i te t e tech gie f f t ef i p e pa t at eact ca e.

WHAT IS FUSION?

F i i the p ce that cc i the c e f the S a d ta . What e ee a ight a d fee a a thi the e t f f i eacti : h d ge c ei c ide, f ei t hea ie he i at , a d e ea e c ide ab e a t fe e g i the p ce . F i i the ce f ife i the U i e e.

I the S a d ta , g a itati a f ce c eate the ece a c diti f f i . O Ea th, f i ca be achie ed th gh ag etic c fi e e t a tech i e that i e high te pe at e pa a a di te e ag etic fie d .

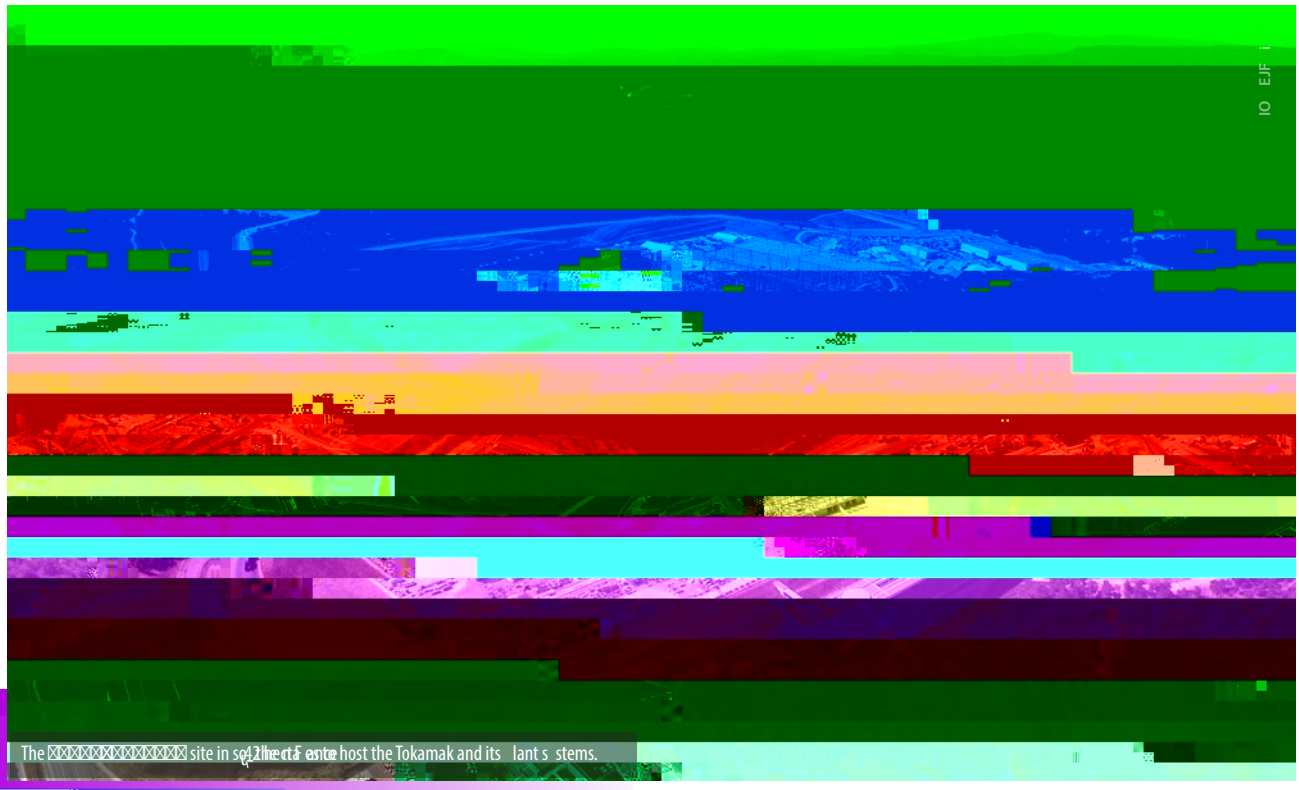
[illegible] a age- ca e cie tific e pe i e t that ai t de tate that it i p ib e t p d ce c e cia e e g f f i . It i the c i ati f i t ea ff i e ea ch, ca ied t h d ed f de ice th gh t the d. E pe i e t [illegible] the a ge tf i de ice e e b it i p ide the data ece a f the de ig a d b e e t pe ati f the fi te ect icit - p d ci g f i p e pa t .

[illegible] a a i ei te ati a c ab ati that b i g t gethe Chi a, the E pea U i , I dia, Ja pa , K ea, R ia a d the U ited State e e Me be (35 ati) that e pe e t 80% f the d GDP a d ha f the pa et p p ati . The [illegible]Me be a e ha i g the e p ibi it f de ig i g, b i di g a d pe ati g the [illegible] ta ati .

B a i deci i i 2005, the [illegible]Me be ch e a ite p p ed b the E pea U i i the F a ce. F i g the e tab i h e t f the [illegible]O ga i ati a d pe pa at ite , c t cti f the b i di g bega i A g t 2010.

The [illegible]e pe i e ta faci it i be pe ati a i 2025. Ma fact i g i de a i [illegible]Me be fact ie th ee c ti e t, a d the fi t c peted c p e t ha e a ead eached [illegible]

Cover page: At the heart of the Tokamak Complex the concrete bioshield is now complete. Major machine assembly activities begin in 2020.



The site in southern France will host the Tokamak and its plant systems.

A "toroidal chamber with magnetic coils" ... The Tokamak will be the most important machine ever built.

WE ARE BUILDING

In the heart of France, more than 2,000 people are participating in the construction of the scientific facility that will accelerate progress in 39 building and technical areas that will help the Tokamak operate. With financial support from the European Atomic Energy Community for the ITER Project.

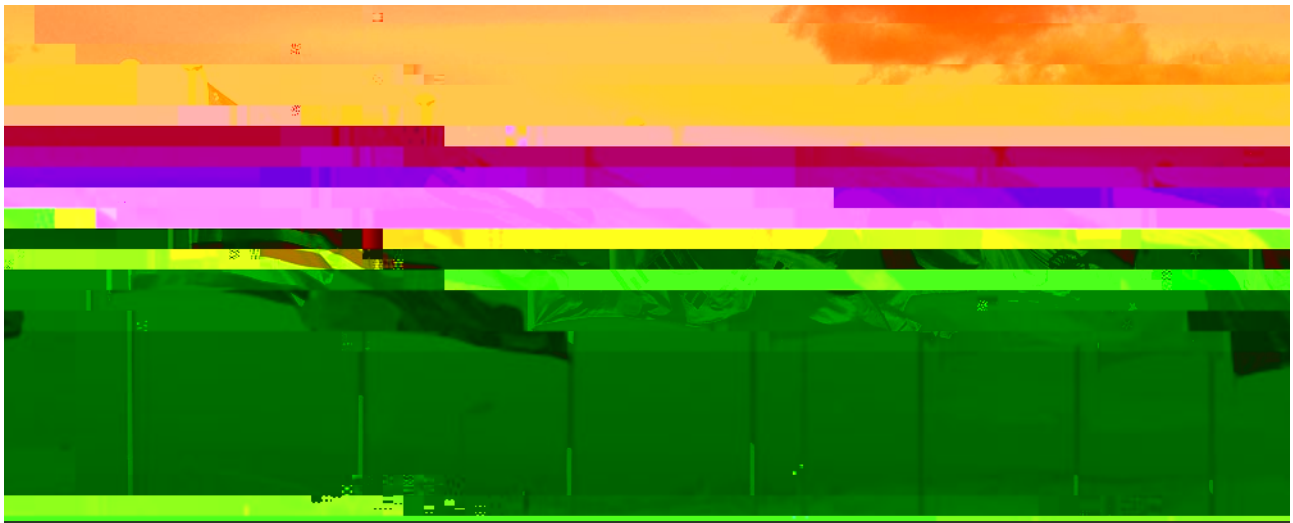
At the center of the Tokamak, here the experiments will be carried out for 2025. After a four-year campaign to create the building infrastructure (2010-2014), construction of the ever-larger structures. Six-story tall, 400,000 tons of steel will surround the first vacuum vessel sections and mechanical equipment.

Nearby, in the Assembly Building, teams are taking great care with sophisticated components for the power-assembly of machine components. First ever-heavy, heavy lifting cranes in the France will assemble the Assembly and Tokamak Building during the construction phase, carrying components that weigh up to 1,500 tons.

Completed construction projects already underway for the ITER Member. But the foundation of the agreement and the construction materials provided by the countries. Fabrication activities for the equipment components are going on dedicated worksite facilities supplied by European industry.

In the area of the construction platform, equipment installations in the assembly building hoisting the assembly (crane, crane logic, power supply, heating) that are necessary for ITER operations.

Assembly activities in 2020 the number of workers expected to climb to 3,000, with a peak construction workforce.



Se en Membe s China, the E o ean Union, India, Ja an, Ko ea, R ssia and the United States a e sha ing the es onsibilit fo designing, b ilding and o e ating the in on in so the n F ance. Fi st Plasma is lanned fo Decembe 2025.

Be na d Bigot, Di ecto -Gene al since Ma ch 2015, ebsite (ite o g).

Y ki a Amano, Di ecto Gene al of the Inte national Atomic Ene g Agenc (IAEA), o cial isit to , 6 I 20

Jose-Ma el Ba oso, P esident of the E o ean Commission, o cial isit to , 1 I 2014

Pie e Gadonnei , esident of the Wo ld Ene g Co ncil, Monaco Inte national F sion Ene g Da s (MIIFED), 4 Decembe 2013

Ste hen Ha king, h sicist, cosmologist, *Time Magazine*, 15 No embe 2010

WHY WE
NEED FUSION

B the e d f the ce t , de a d f e e g i ha e t iped de the c bi ed pe e f p p ati g th, i ce a ed ba i ati a d e pa di g acce t e e g i de e pi g c tie . A e a ge- ca e, tai ab e a d ca b -f ee f fe e g i ge t eeded. The f i g ad a tage a e f i th p i g.

Ab da e e gy: F i g at t gethe e ea e ea f i i ti e e e g tha a che ica eacti cha the b i g f c a, i ga a d f ti e a cha ce a fi i eacti (ate a a). F i ha the p te tia t p ide the id f ba e ade e g eeded t pp e ect icit t citie a d id tie .

S ai abi i y: F i f e a e ide a ai ab e a d ea i e ha tib e. De te i ca be di ti ed f a f f ate . Titi ca be p d ced d i g the f i eacti a f i e t ite act ith ithi a d ithi f p e , ea i e t actab e a d-ba ed e ce d be e gh t pe ate fi p e pa t f e tha 1,000 ea .

N g ee h e ga s: F i d e 't e ea e ca b di ide the g ee h e ga e i t the at phe e.

N e g i ed ad ac i e a se: U ie fi i eact , ce a f i eact p d ce high acti it , g i ed ce a te.

N p ife a i : F i d e 't e p fi ie ate ia that c d be e p ited t a e ce a ea p .

N i so f e d : A F hi a-t pe ce a cata t phe i t p ib e i at a a f i de ice. If a di t ba ce cc , the pa a c ithi ec d a d the eacti t p.