

Enerjide farklı konular üzerine Görseller

SolarBaba - Sohbet

2 Mayıs 2020

Barış Sanlı

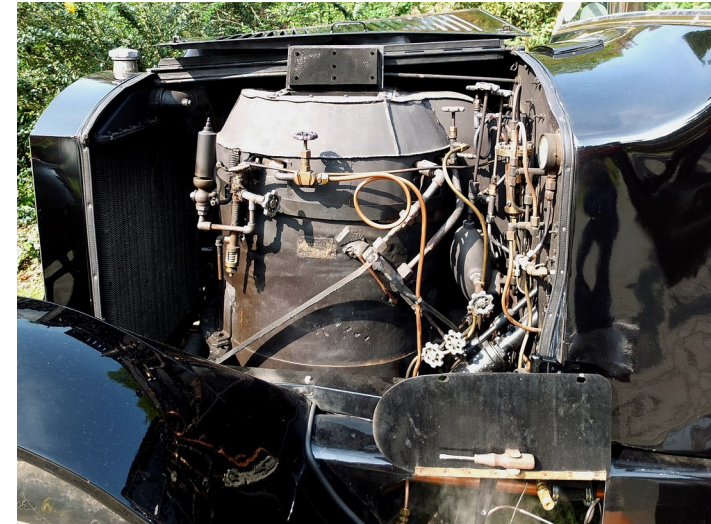
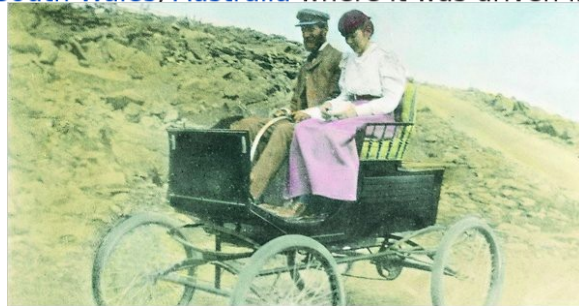
Buharlı araba

- Uçan demlik – Stanley steamer

A Stanley Steamer set the world record for the fastest mile in an automobile (28.2 seconds) in 1906. This record (127 mph or 204 km/h) was not broken by any automobile until 1911, although [Glen Curtiss](#) beat the record in 1907 with a V-8-powered motorcycle at 136 mph (219 km/h). The record for steam-powered automobiles was not broken until 2009.^{[5][6]}

Production rose to 500 cars in 1917.

The Stanley Steamer was sometimes nicknamed "The Flying Teapot".^[7] At least one Stanley Steamer found its way to [Castle Hill, New South Wales, Australia](#) where it was driven in the late 1920s.^[8]



https://en.wikipedia.org/wiki/Stanley_Motor_Carriage_Company

Yaz saati



William Willett (10 August 1856 – 4 March 1915) was a British builder and a tireless promoter of [British Summer Time](#).

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Biography [edit]

Willett was born in [Farnham, Surrey](#), in the United Kingdom, and educated at the [Philological School](#). After some commercial experience, he entered his father's building business, Willett Building Services. Between them they created a reputation for "Willett built" quality houses in choice parts of London and the south, including [Chelsea](#)^[1] and [Hove](#), including [Derwent House](#). Between 18 and he lived in [Acton](#), west London ^[2] but for most of his life in [Chislehurst](#), Kent, where, it is said, after riding his horse in [Petts Wood](#) near his home early one summer morning and noticing how many blinds were still down, the idea for daylight saving time first occurred to him.

This was not the first time that the idea of adapting to daylight hours had been mooted, however. It was common practice in the ancient world,^[3] and [Benjamin Franklin](#)'s light-hearted 1784 satire resulted in resurrecting the idea.^[4] Although Franklin's facetious suggestion was simply that people should get up earlier in summer, he is often erroneously attributed as the inventor of DST while Willett is often ignored. Modern DST was first proposed by New Zealand entomologist [George Vernon Hudson](#), although many publications incorrectly credit Willett.^[5]

Using his own financial resources, in 1907 William published a pamphlet "The Waste of Daylight".^[6] In it he proposed that the clocks should be advanced by 80 minutes in four incremental steps during April and reversed the same way during September.^[7] The evenings would then remain light for longer, increasing daylight recreation time and also saving £2.5 million in lighting costs. He suggested that the clocks should be advanced by 20 minutes at a time at 2 am on successive Sundays in April and be reversed in September.

Through vigorous campaigning, by 1908 Willett had managed to gain the support of a member of parliament (MP), [Robert Pearce](#), who made several unsuccessful attempts to get it passed into law. A young [Winston Churchill](#) promoted it for a time,^[8] and the idea was examined again by a parliamentary select committee in 1909 but again nothing was done. The outbreak of the [First World War](#) made the issue more important primarily because of the need to save coal. Germany had already introduced the scheme when the bill was finally passed in Britain on 17 May 1916 and the clocks were advanced by an hour on the following Sunday, 21 May, enacted as a wartime production-boosting device under the

William Willett



William Willett in 1909, photographed by Sir John Benjamin Stone

Born	10 August 1856 Farnham, Surrey, England, UK
Died	4 March 1915 (aged 58)
Nationality	English
Occupation	builder
Known for	Daylight saving time



Burhan Felek'in imtihanı

1947

Efendim, çümlece malûm olduđu üzere bu yaz saati bizde bir nevi görenak özeneti mahsulü olarak teessüs etmiştir. Harb sıralarında, bilhassa İngilterede saatleri bir değil, iki saat ileri sürmüşlerdi. Bu yalnız yazın değil, kışın da böyle idi. Bunun faydası insanları güneşle beraber işe başlatıp, gurubla beraber ışıkları söndürmek ve böylece hem elektrikten tasarruf, hem de karartmanın mahzurlarını mümkün mertebe azaltmak idi.

Harb bittikten sonra bu lüzum yalnız, elektrik sarfiyatından istifadeye münhasur oldu. Bizim memleket gibi elektrik sarfiyatı ve fabrika hayatı kesif olmayan yerlerde de sırf medeni sınıflan bir usulün tatbikünü kabul etmiş olmanın, ileri bir faydası olduğuna bugün için kani değilim. Buna mukabil bu seneki gibi erken tatbikine geçilmesi, çocukların çok erken kalkmalarını, hele Boğazdan şehre gelecek mektebililerin karanlıkta vespura binmelerini, leab ettirdi. Bundan başka mağazaların yedide kapanması yüzünden çarşı güpegündüz

nin, kendi hesabına bir faydasını görmedim. Ama başkalarının elde ettikleri faydayı da müşahede etmiş değilim. Şunu bize, mütchassuslardan birisi -nazari olarak değil- hesabla kitabla eşu kadar elektrik enerjisi, bu kadar kömür, bu kadar zaman kârimiz var» diye anlatsa inanacağım. Lâkin nerede o hayır sahibi?

Demek ki sevgili okuyucumla, bu yaz saatinin faydasını bilmemek hususunda birleştik. bu da bir kârdır.

B. FELEK

1951

Hadiseler Arasında FELEK

Yaz saati - Kış saati

Nihayet, 6-7 ekim gecesi yaz saatinin kalkacağına öğrenmekle yedi sekiz ay için müteselliyiz.

Yarıyından fazlası hâlâ ezanî saat kullanan bir memlekette, yaz saatine ne lüzum hissedilmiştir? Allah ecir sabır versin, bu da Halk Partisinin bir bid'atidir ki; Demokratlar, bir çok Halk Partisi metrukâtı arasında bunu da benimsemişlerdir.

Kaç kişiye sordum, bana hakikî sebebini veremediler. Nihayet ikına sukına bir kaç yüz, bir kaç bin banka, büro, mağaza müstahdeminin akşamları biraz erken çıkıp hava almaları için yapıldığını ileri sürdüler. Bunlar, şimdi saat sekizde işbaşına gitmek için güneş doğmadan yataklarından kalkmaya mecbur olunca yaz saatinin ne nimet olduğunu anlamışlardır.

Bir kere bu yaz saati meselesini artık kökünden halletmeliyiz. Hü-

Ama eğer:

— İlle de tatbik edeceğiz! diye inad edecekseniz bari bunun için bir kararname nesredip:

«Türkiyede saatler 15 mayıstan sonra gelen ilk cumartesi gününü pazara bağlayan geceyarısı bir saat geri alınır ve 1 ekimden sonra gelen cumartesiyi pazara bağlayan geceyarısı saatler tekrar normal zamana irca edilir» diye ilân edip işin içinden çıkmalı.

Bakınız her sene bekliyoruz. Her halde yaz saatini kış saatine çevirecek daire, Bakanlık veya heyette bu iş görüşüldüğü zaman her halde şöyle lâf ederler:

— Yahu, yaz saatini ne zaman kaldıracaktız?

— Bilmem. Geçen sene ne zaman kalktı idi.

— 5 ekimde galiba.

— Zannetmem. Bir kere baktıralım.

— Yok acanım, aybaşında kaldıralım.

— Hamed Beye sordun mu?

— Hamed Bey ne karışır?

— Deli misin be! Bir kere soralım.

— Soralım.

Hamed Beye sorulur. O da önce;

Kurulu güç ve ilk hesaplar

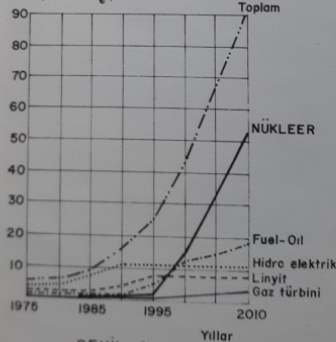
TABLO :3 1972-1987 YILLARI ARASINDA
PUVAN GÜÇ TAHMINLERİ

Yıllar	1972	1977	1982	1987
Puvan Güç (MW)	2100	4030	6970	11730

Görüldüğü gibi üçüncü beş yıllık plân döneminde her yıl ortalama 400 MW, dördüncü beş yıllık plân döneminde 600 MW ve beşinci beş yıllık plân döneminde 950 MW gücünde yeni santrallerin devreye girmesi gereklidir.

Yurdumuzda bulunan elverişli su gücü ve linyit kaynaklarının zamanla azalması büyük petrol kaynaklarının bulunmaması ve nükleer santrallerin büyük ünite güçlerine gidildikçe daha ekonomik olması gözönüne alınarak 1983-84 yıllarından itibaren elektrik üretiminde nükleer santral-

Kurulu güç
(1000 MW_e)



ŞEKİL : 2

TÜRKİYE'DE ELEKTRİK
ÜRETİMİNDE ÇEŞİTLİ KAYNAKLAR

lardan varılma
nomik
saplara
düğü g
meye
95 yıll
2000 y
üretimi

Türkiye
İşmala

197
ji Dair
önce n
rı değ
başlanı

196
naklar
rafında
netimil
göre v
lan de
ve ek
1980
Soma,
ralları
lendiril
revize
harınd
MW g
yılında
denem
ticari
sı öğ

Tesbit

197
lanma

197
ğerlen
kesin

KARŞILANAMAYAN ENERJİNİN EKONOMİYE ETKİLERİ :

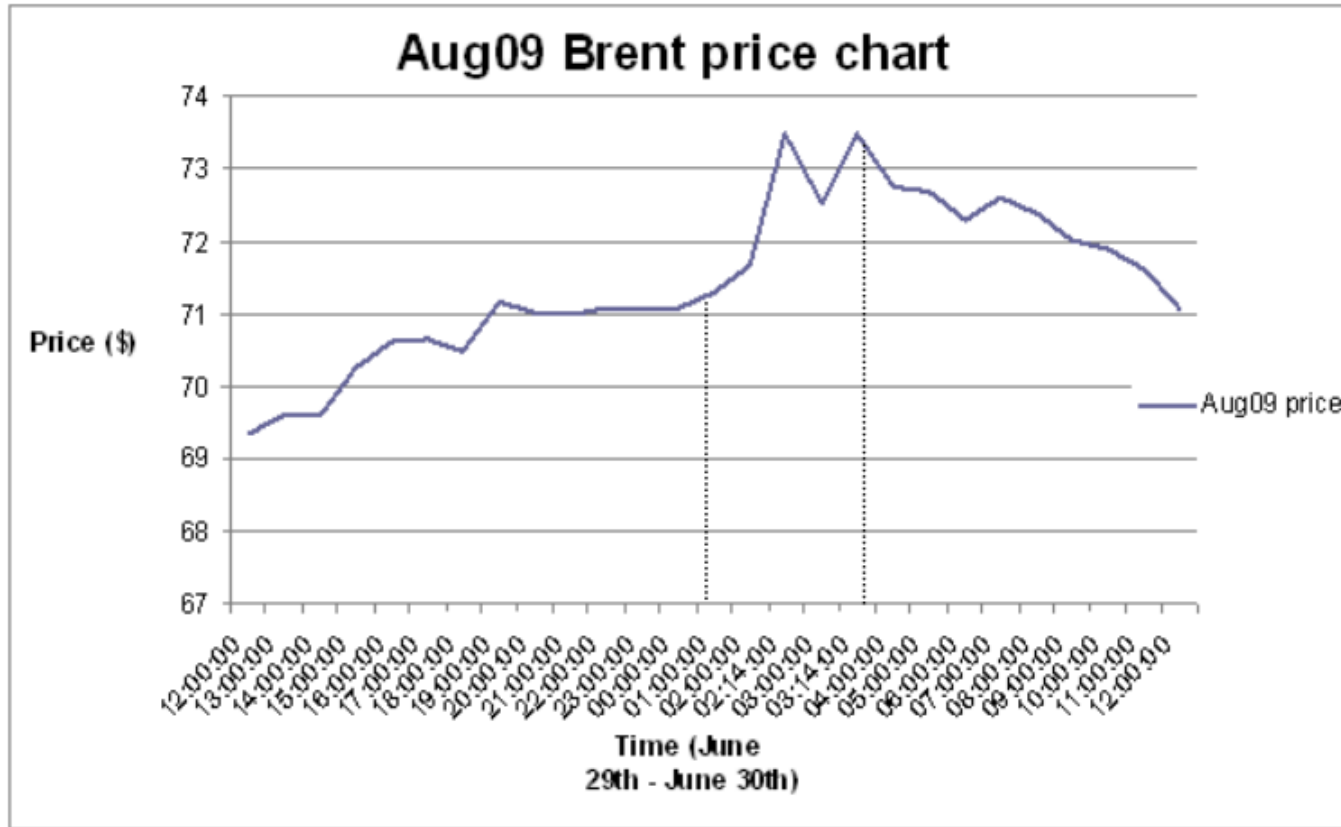
Elektrik enerjisi talebinin ani oluşu ve oluştuğu anda mutlaka karşılanması gereği, bu tür enerjinin en önemli özelliğidir. Bu özellik, elektrik sektöründe plânlamadan işletmeye kadar her safhadaki faaliyetlerin tüm ekonomiye etki yönünden değişik açılardan değerlendirilmesini gerekli kılmaktadır.

Bu sektördeki herhangi bir yatırımın yapılmaması nedeniyle, talebin karşılanamamasının tüketicilere ve dolayısıyla tüm ekonomiye verdiği zarar büyük mertebelerde olmaktadır.

1971 yılında Batı Anadolu Bölgesinde uygulanmak zorunda kalınan talep kısıtlamasının etkileri Kurumumuzca anket yoluyla araştırılmış, değerlendirme sonucunda kısıtlamadan etkilenen müşterilerin, özellikle sanayicilerin, talep ettikleri halde karşılanamayan her kWh için 753 kuruş zarara uğradıkları ortaya çıkmıştır. Bu konudaki çalışmalar henüz tamamlanmamış olmakla beraber, Türkiye Enterkonnekte Sisteminin yurdun üçte ikisini kaplayan ana bölümünde, talep edildiği halde karşılanamayan enerjinin bedelinin 3.5 TL/kWh olduğu kanaatine varılmış bulunmaktadır.

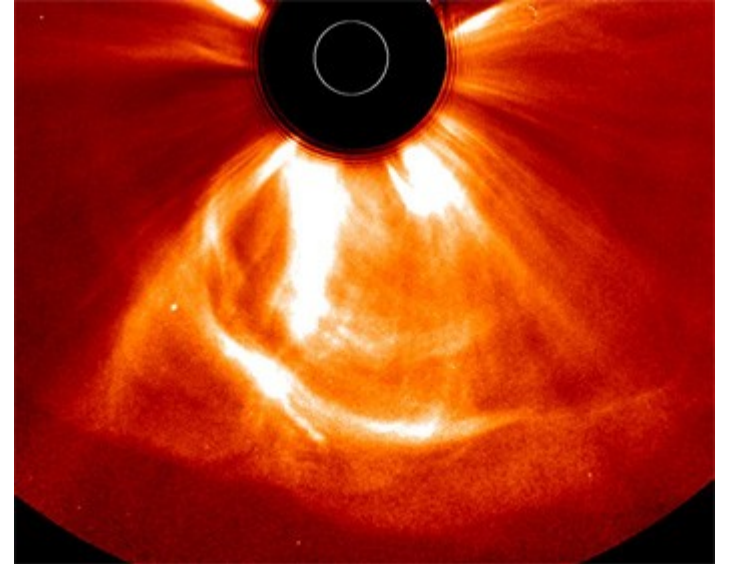
Bir örnek verilirse, üretim yetersizliği dolayısıyla yedeksiz çalışıldığı bir işletme rejiminde arızalanan 150 MW'lık bir üretim grubunun servisten çıkması halinde 2 saatlik talep kısıtlamasının ekonomideki kaybı asgari 1 milyon TL olacaktır. Bu örneği ters olarak düşünürsek, 150 MW'lık bir üretim grubunun 2 saat önce servise girmesi, ekonomiye asgari 1 milyon TL katkı sağlamaktadır.

İçip içip Brent kontrat almak

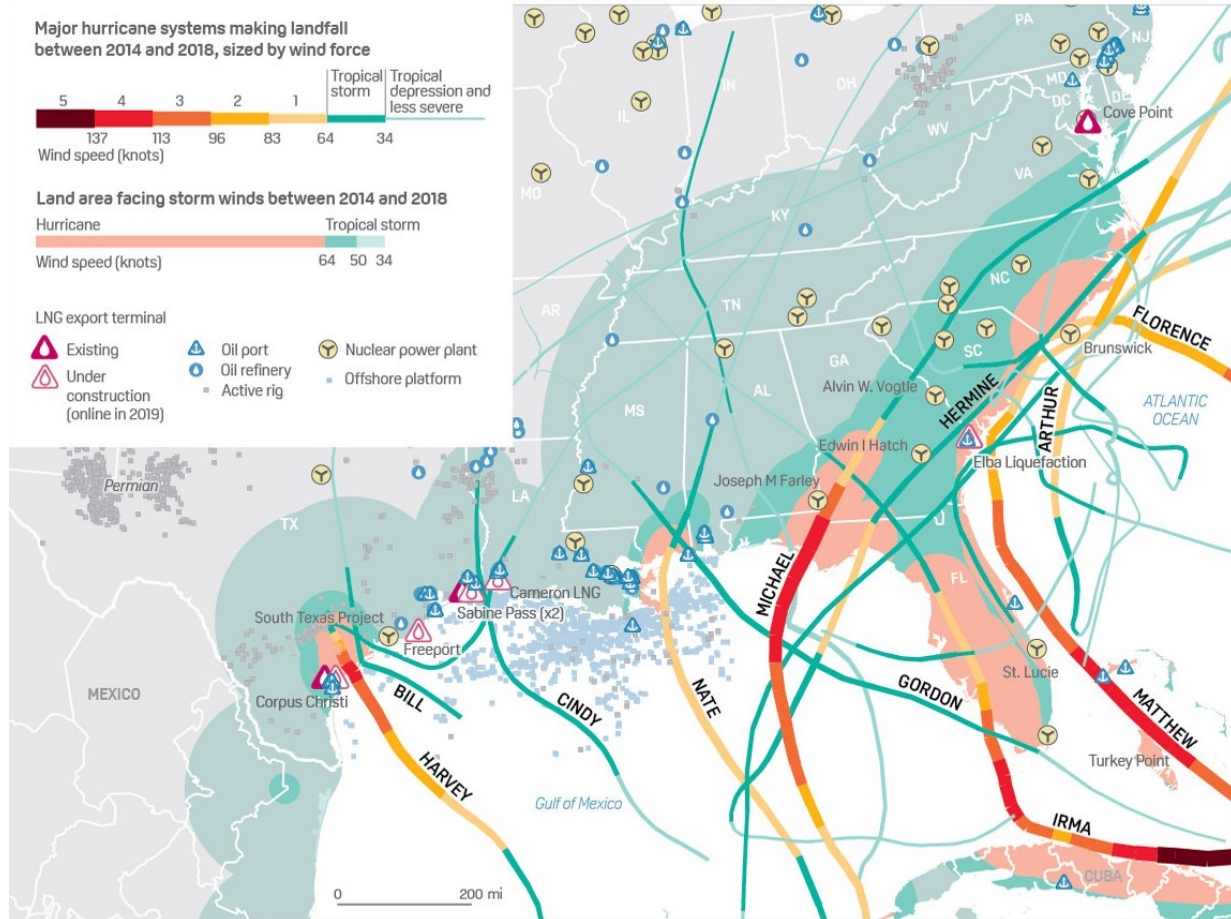


2012 Güneş Fırtınası

- 1859'da Avustralya -Queensland'de Aurora
- 2012'de 23 Temmuz'da oldu
- 25 gün ile ıskaladı
- Yoksa trilyon \$

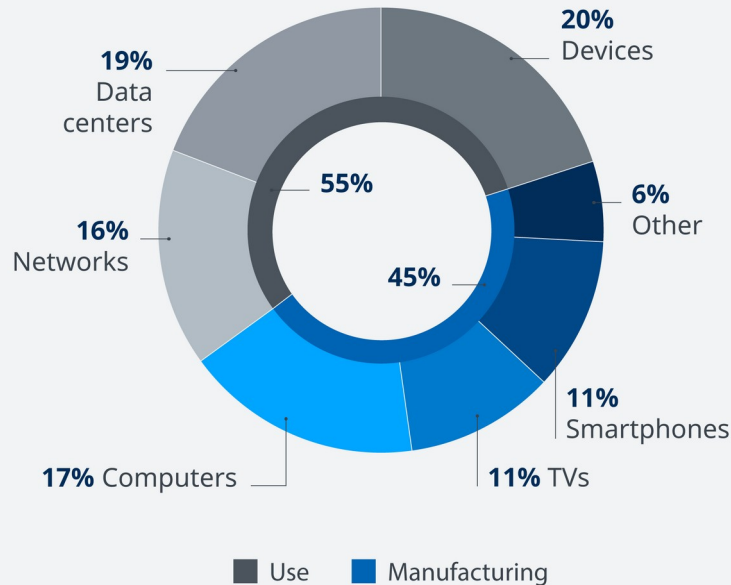


Ağustos Ortası-Ekim: Kasırga sezonu



Internet'in Enerji Kullanımı

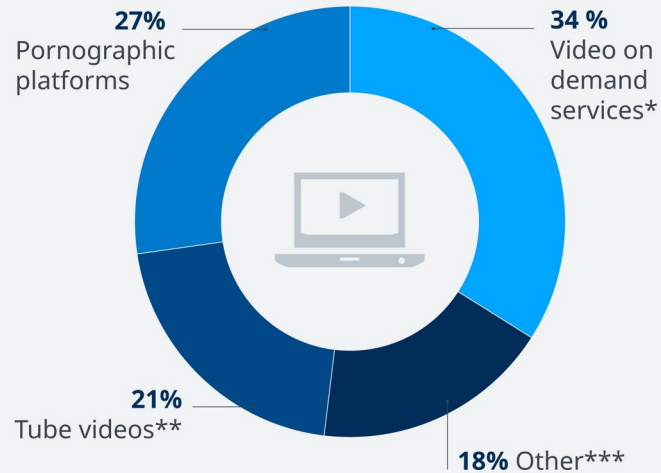
Energy consumption in the IT sector



Source: Lean ICT - Towards Digital Sobriety / The Shift Project 2019

©DW

Global online video traffic



*Netflix, Amazon, etc.

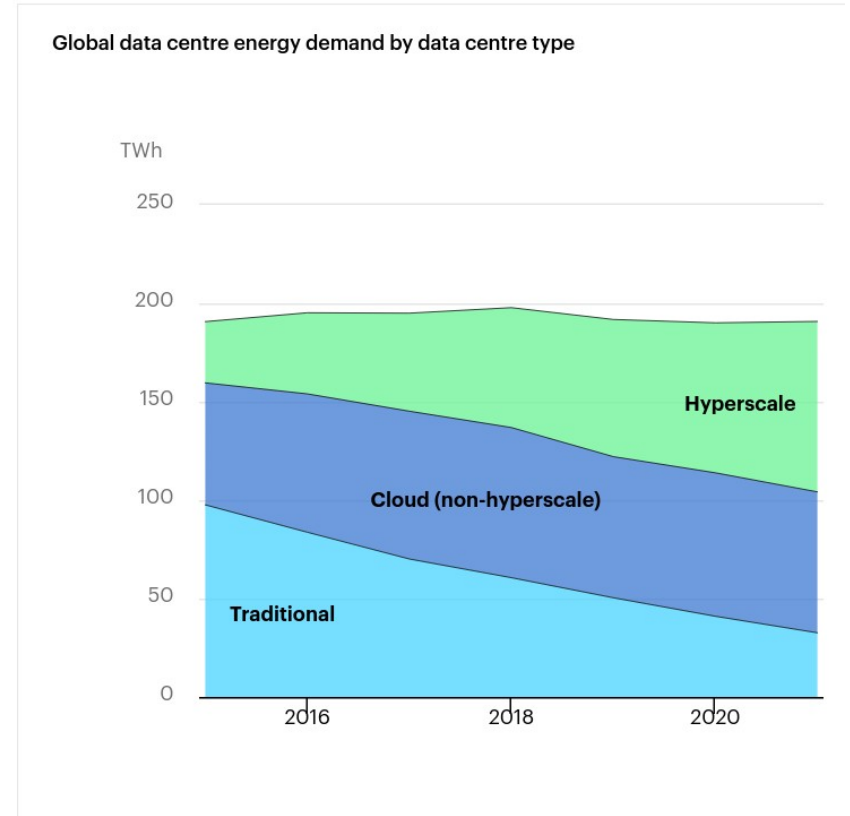
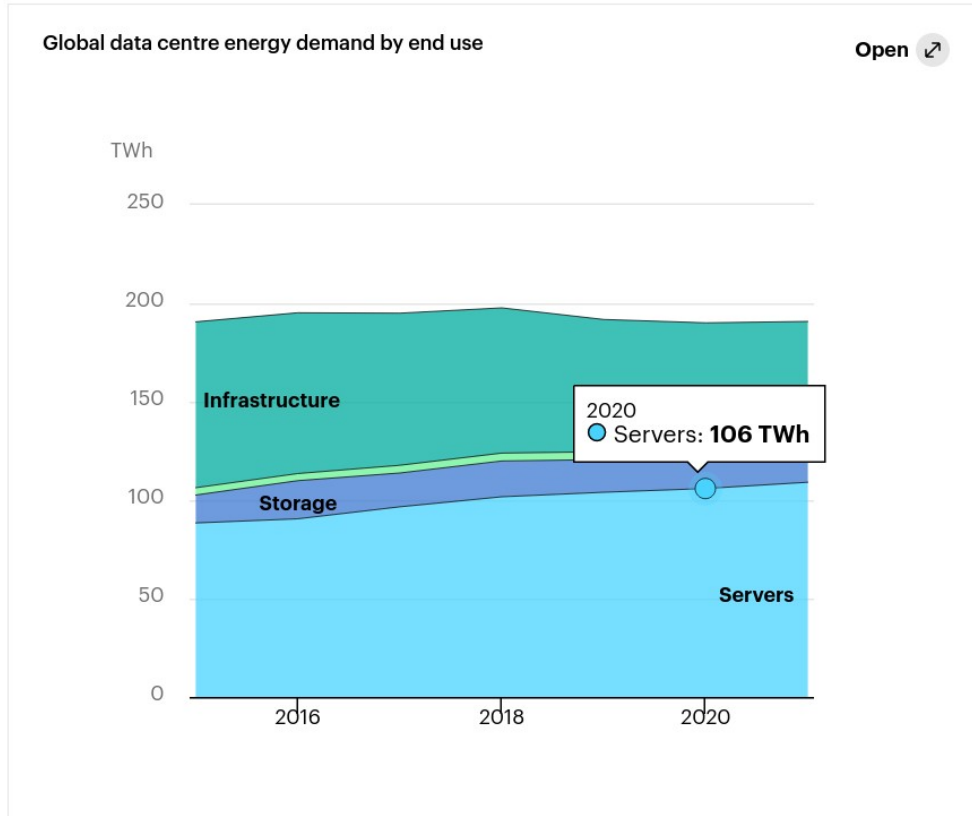
**Youtube, vimeo, etc.

***Social media and other platforms

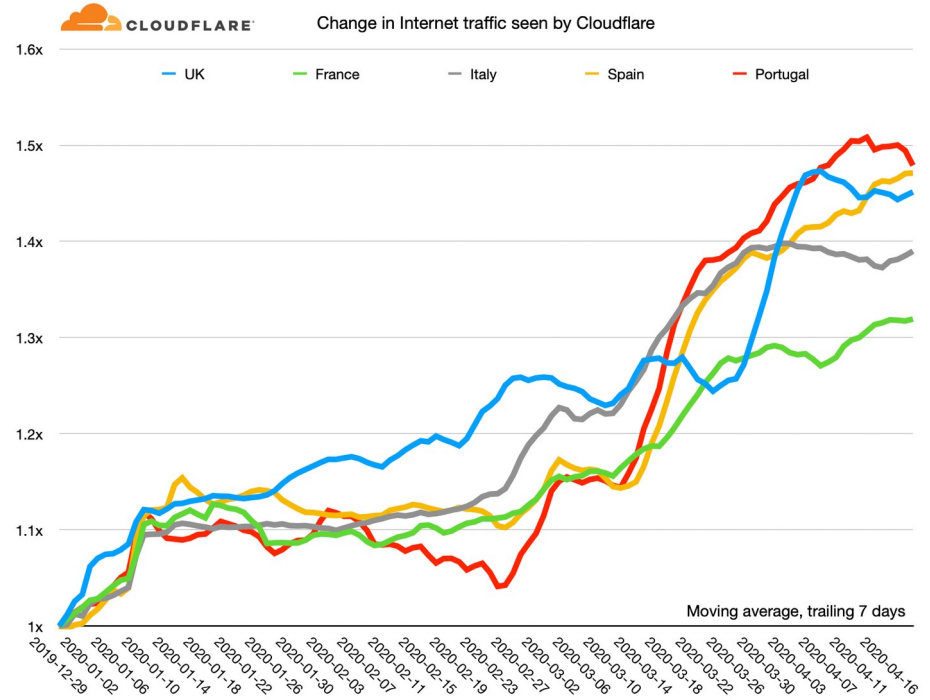
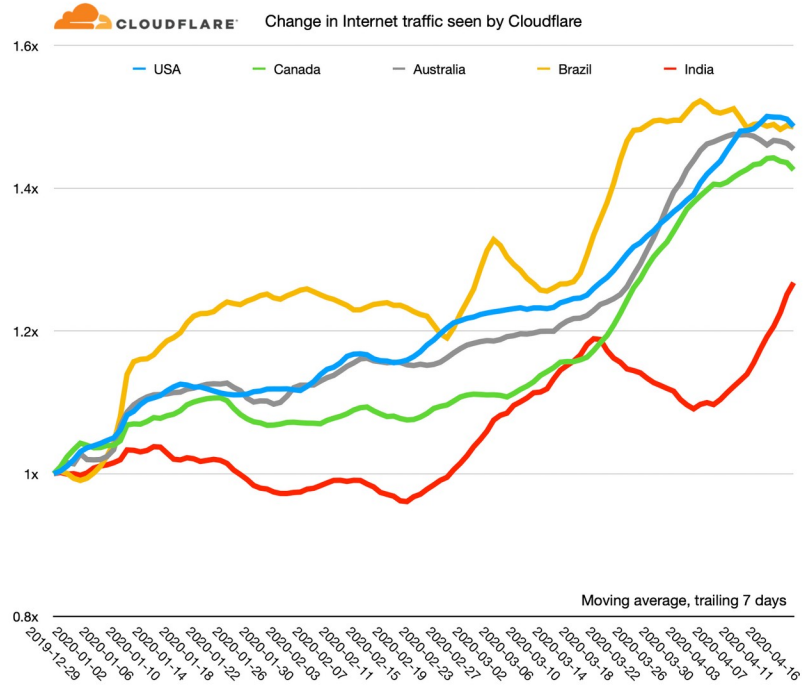
Source: Lean ICT - Towards Digital Sobriety / The Shift Project 2019

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IEA – ICT Enerji kullanımı

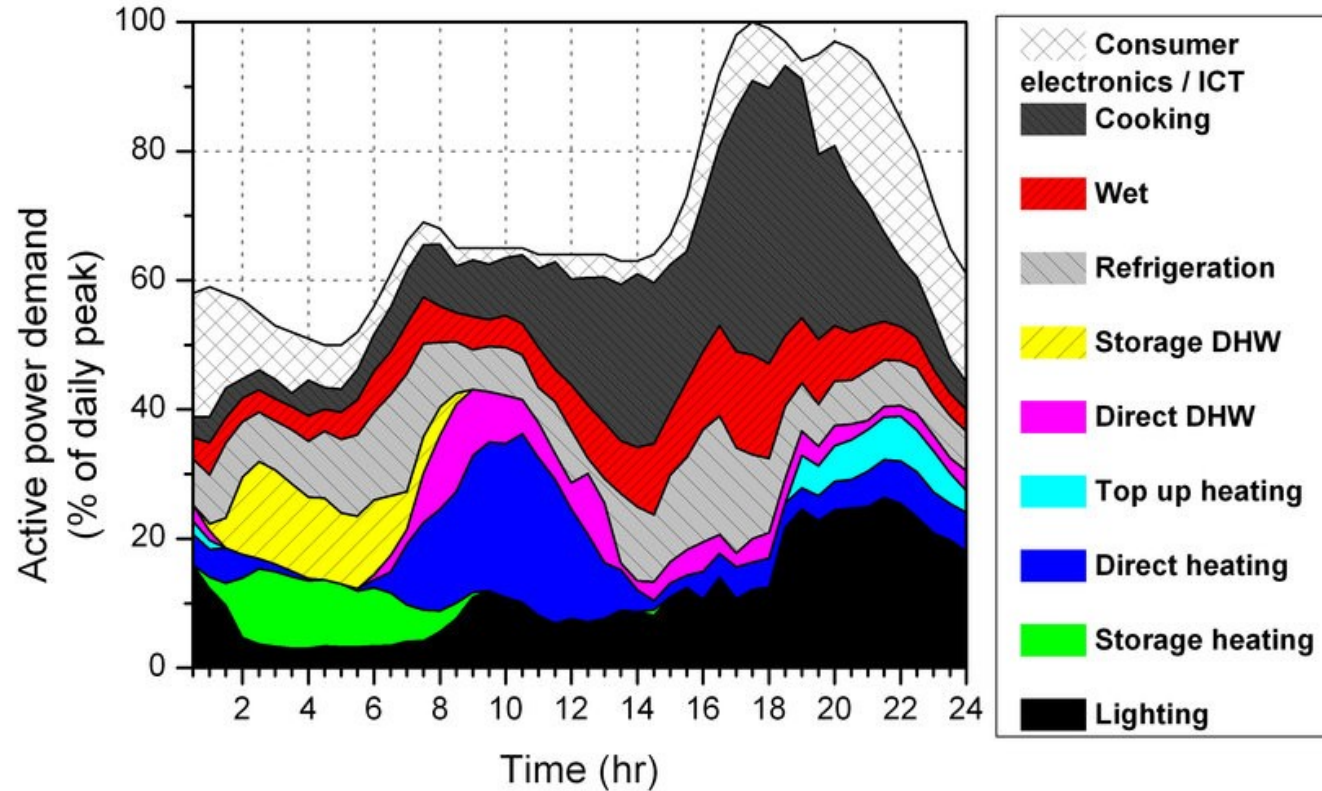


Internet Trafiğinde artış



<https://blog.cloudflare.com/recent-trends-in-internet-traffic/>

Evde ICT'nin elektrik talebine etkisi

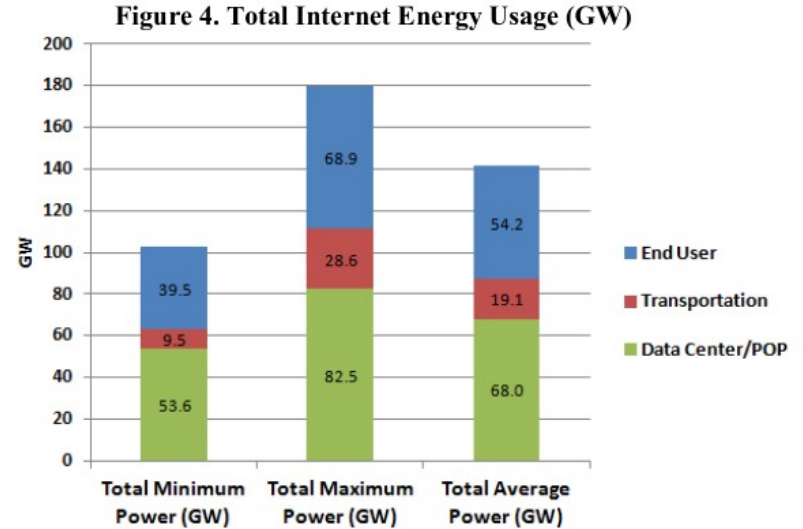


Videonun dakikası

- 5 Mb/s → Dakikada 300 Mbit=37.5 Mbyte
- 1 Saati 2.25 Gbyte
- 5.12 kWh per Gbyte
- 11.52 kWh

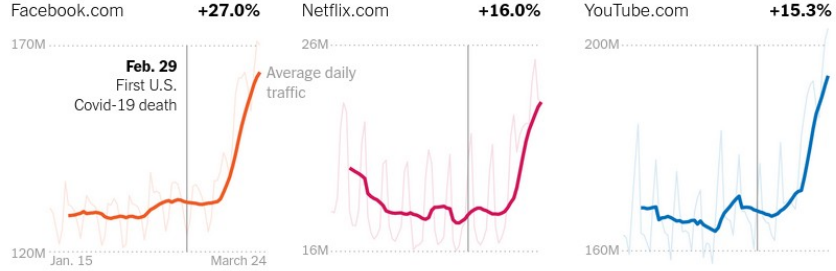


1 saat



Uygulama Trafiği

Websites



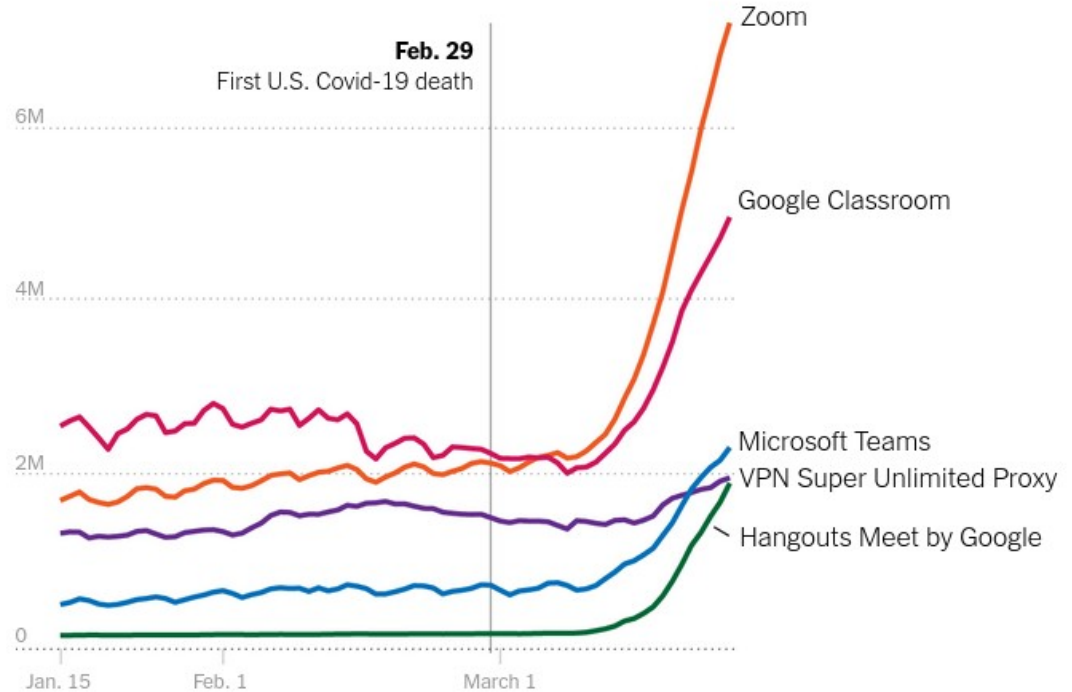
Apps



Note: Averages are calculated with traffic numbers from each date and the six days preceding it in order to smooth out weekly variations (recreational Internet use, for example, often spikes on the weekends). Percent change is from the average on Jan. 21 to the average on March 24. Daily app traffic is measured in sessions — the number of times the app is opened — and one user can have multiple sessions in a day. • Sources:

[SimilarWeb](#), [Apptopia](#)

Daily app sessions for popular remote work apps



App popularity according to iOS App Store rankings on March 16-18. • Source: Apptopia

Cep telefonu mu buzdolabı mı?

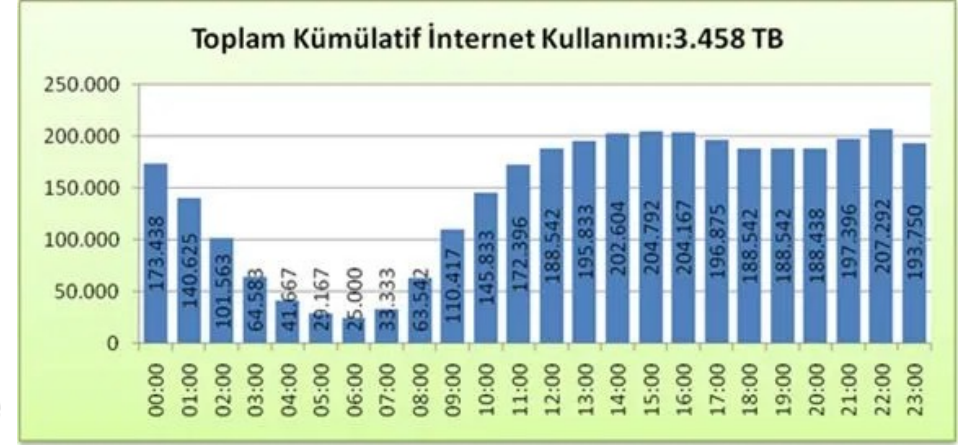
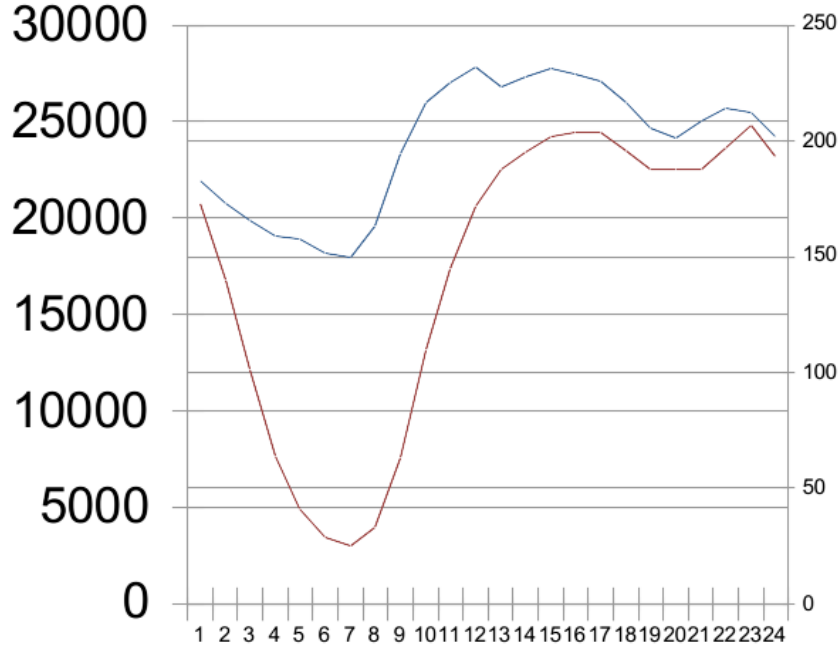
A Smart Phone Uses as Much Energy as a Refrigerator?

A new paper explores whether efficiency can outpace the staggering growth in digital gadgets' power demand

By Katherine Tweed

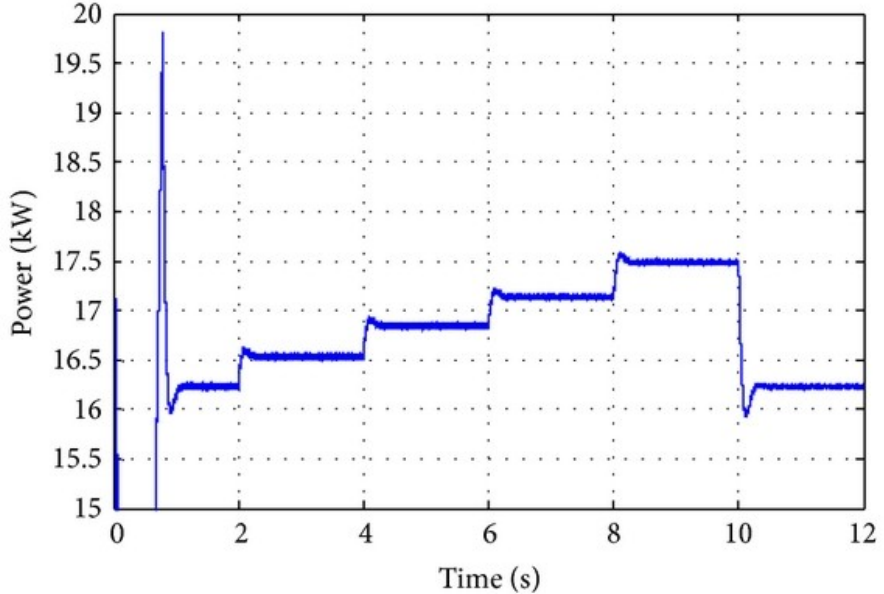
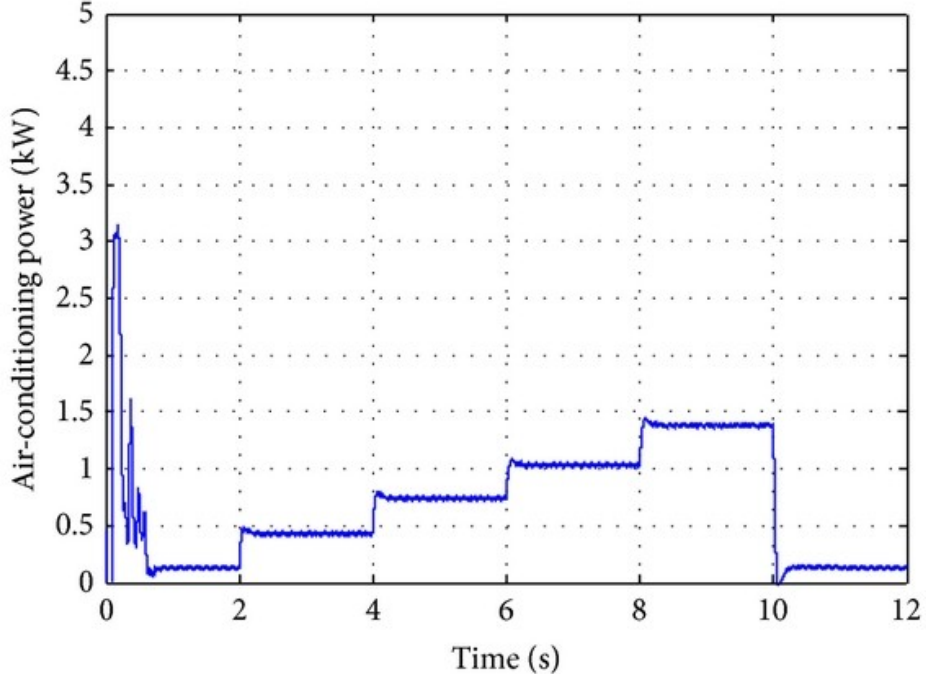


21 Haziran'da İnternet ve Elektrik



<https://www.bakicubuk.com/turkiye%E2%80%99de-internet-kullanimiyla-ilgili-carpici-veriler/>

Araba elektrikli ama



Elektrikli uçak

ANALYSIS

NATURE ENERGY

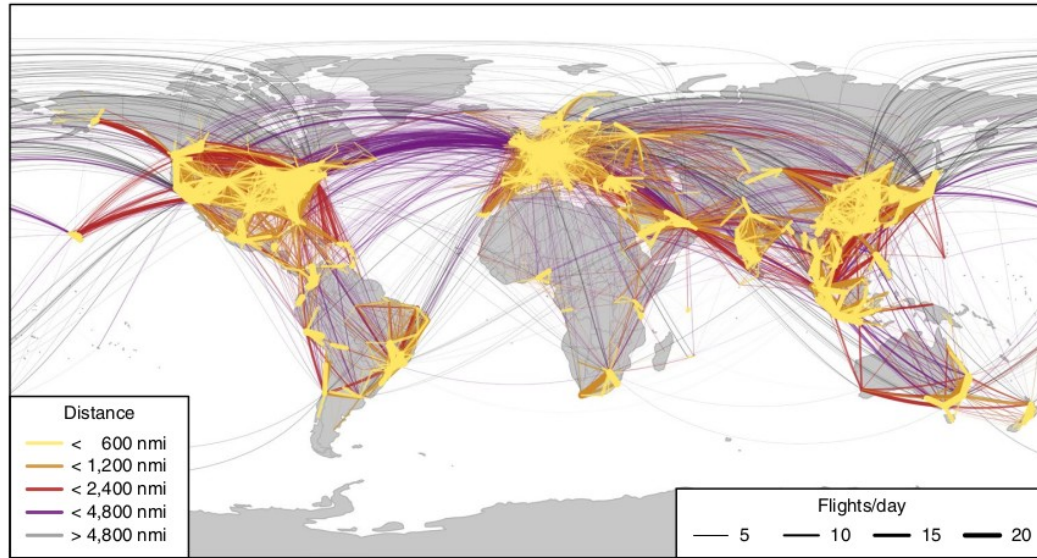


Fig. 3 | Global flight network in 2015 by distance band. Initially, all-electric aircraft operations would be limited to short distances. The range of 1,111 nautical miles (2,067 km), feasible with an all-electric aircraft employing a battery with a specific energy of 800 Wh kg^{-1} (ref. ²³), would require more local networks per continent. With rising battery-pack specific energy and flight distances, individual continental flight networks would consolidate. However, from today's perspective, it is questionable whether all-electric aircraft will be capable of operating over distances of 2,222 nautical miles (4,122 km) or more with a single-stage flight, as this would require a battery-pack specific energy of at least $1,600 \text{ Wh kg}^{-1}$ (ref. ²³). This implies that all-electric aircraft would mostly operate on intra-continental routes rather than the long-distance transatlantic or transpacific routes.

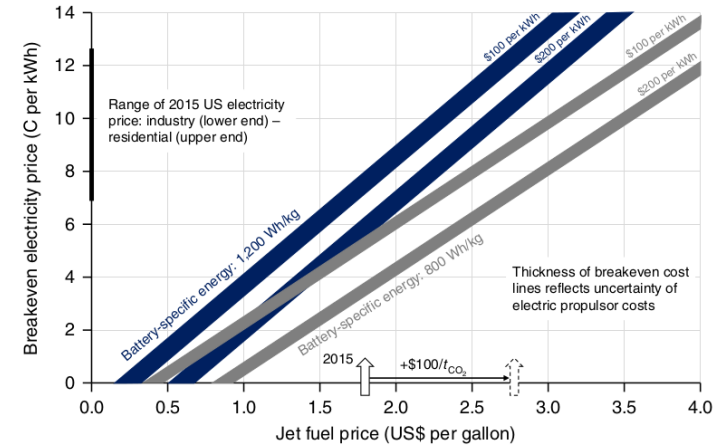
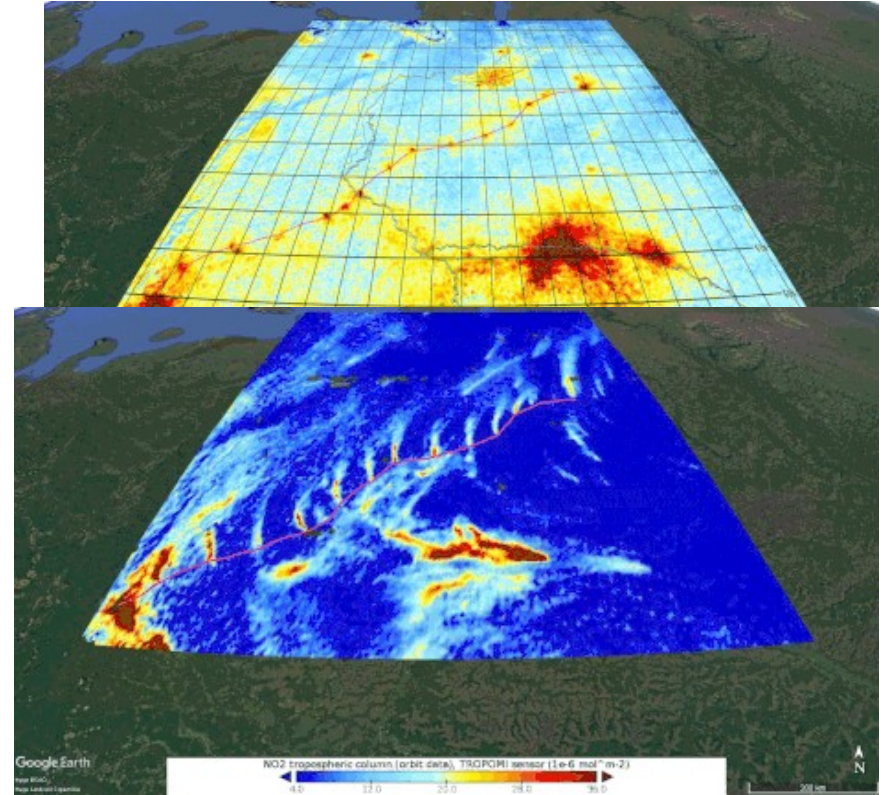
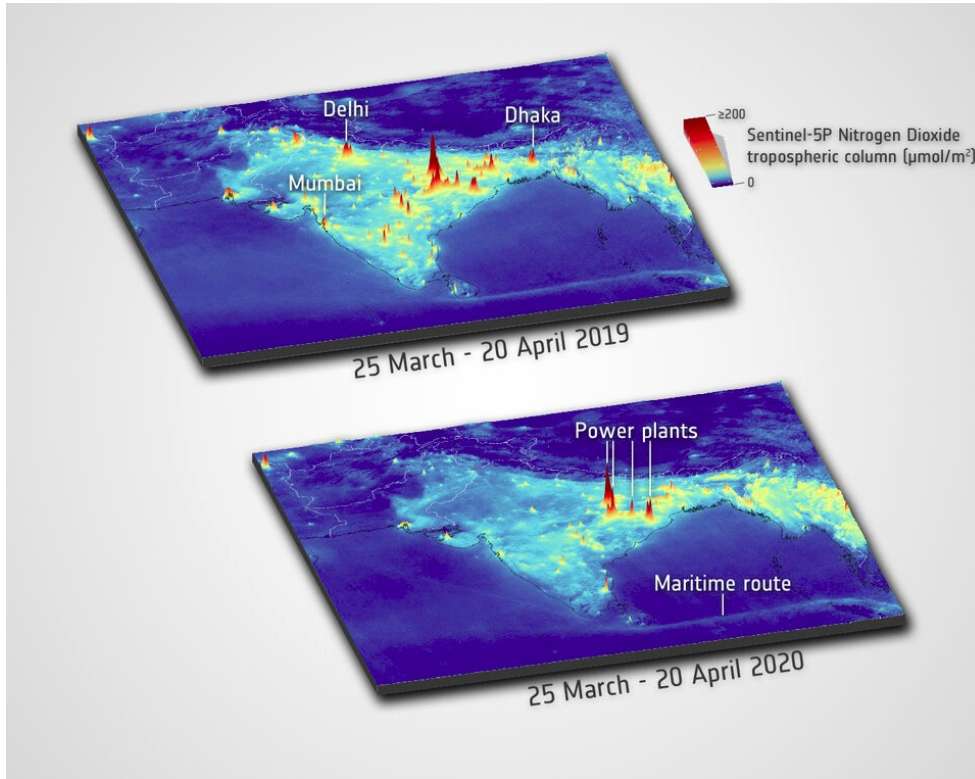


Fig. 2 | Break-even electricity price for a first-generation all-electric aircraft. The reference jet engine aircraft is an Airbus A320neo. The all-electric aircraft has batteries with a specific energy of 800 Wh kg^{-1} (grey lines) or $1,200 \text{ Wh kg}^{-1}$ (blue lines), each with battery costs of US\$ 100 kWh^{-1} or US\$ 200 kWh^{-1} . On the basis of a battery-pack specific energy of 800 Wh kg^{-1} , jet fuel prices would need to be at least US\$ 2.3 or 2.8 per gallon (US\$ 97 or US\$ 118 per barrel)—depending on the cost of $1,200 \text{ Wh kg}^{-1}$ battery.

Uydudan enerji altyapısı



İstanbulda hava kirliliği

Aura/OMI NO₂ for Istanbul, Turkey (28.95E, 41.02N)
1° Latitude x 1° Longitude box around city center

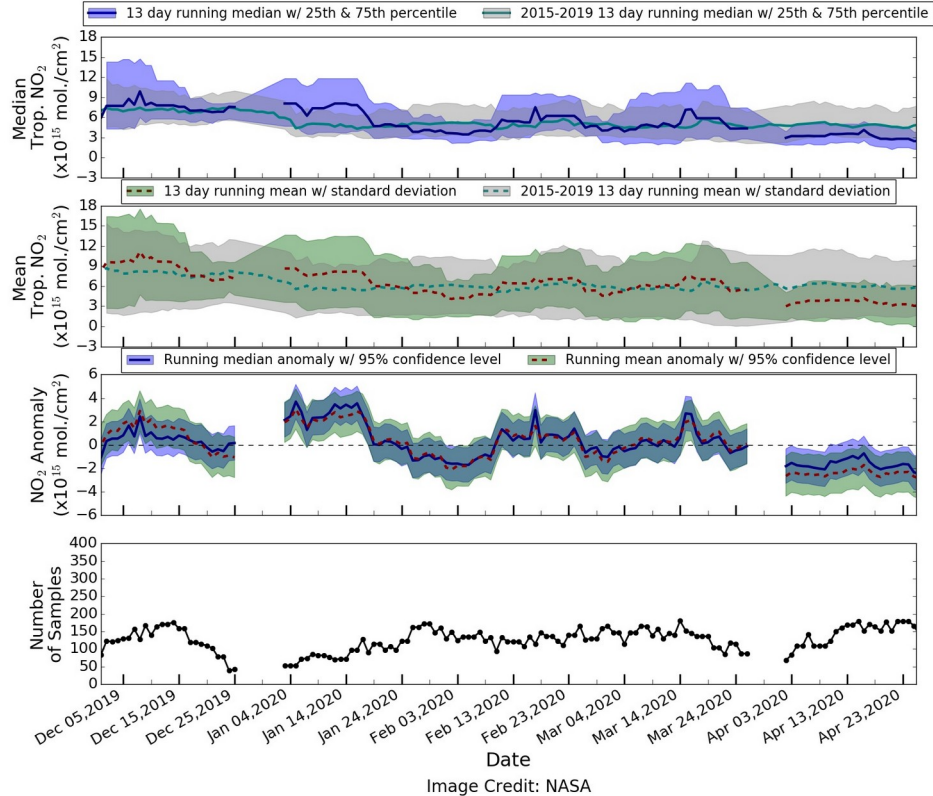
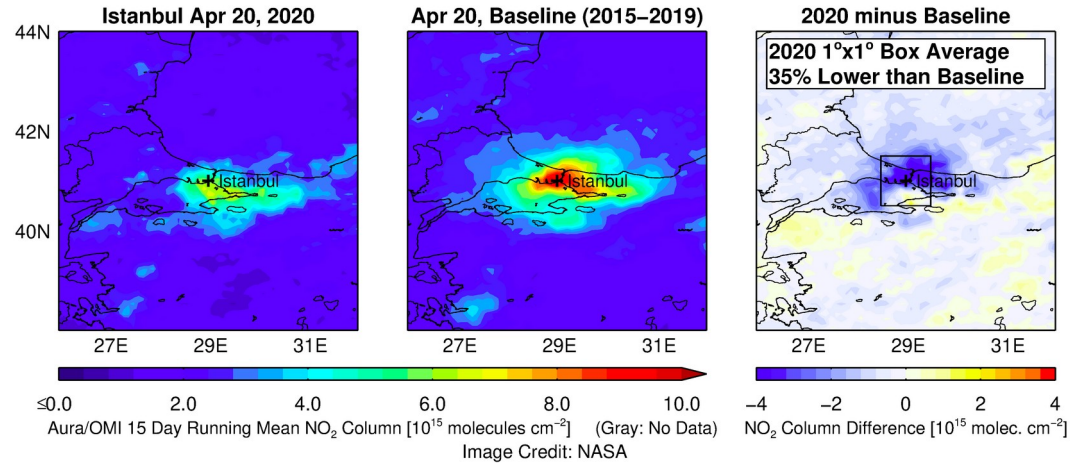


Image Credit: NASA



https://so2.gsfc.nasa.gov/no2/pix/htmls/Istanbul_data.html

Elektrik mühendisliğine ilgi duyan kediler, sincaplar

Cat knocks out power to much of New Orleans after getting into Entergy substation

WWL staff

Published 1:17 p.m. ET Sep. 17, 2018



Electricity transmission lines. Getty Images

NEW ORLEANS – Thousands of Entergy New Orleans customers lost power for more than an hour after a cat got into a substation Monday.

The outages began around 8:30 a.m. Monday morning, according to the Entergy New Orleans. Power was restored around noon, the company

RELIABILITY
An open letter to squirrels
January 21, 2019 Alex Hofmann

Home / Blog / An open letter to squirrels

It's National Squirrel Appreciation Day.

I'll admit we have our disagreements with squirrels. Namely, they **cause thousands of power outages** each year, causing damage to electric infrastructure and headaches for workers, and disruptions for customers.

Historically, the best those of us in the industry can say about squirrel appreciation is that we'd appreciate it if they stayed away. But today, we're willing to try a different tactic. Let's work together to keep us all safe and the lights on.

To start, we have a few tips for how squirrels can stay safe:

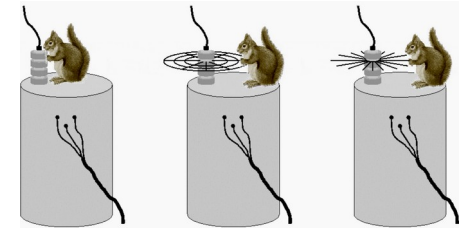
- **Obey warning signs.** Don't touch, hang out near, or hover above transformers. And while you're at it, please keep away from substations, too.
- **Don't build your nest on electrical equipment:** This environment is no place to live.
- **Find another route.** Avoid using conduits or going inside insulated pipes/wires – they may look like a nice sheltered route from the weather, but they are actually there to protect you from high voltage. In short, stick to the trees (see last tip).
- **Be flexible and ready for change.** If you find that your carefully built nest is gone, it might be because you built it somewhere unsafe. There's probably a suitable alternative nearby.
- **Think before you chew.** Gnawing on lines and other equipment might be soothing on your teeth, but poses a significant danger to you. You don't want a power line to be your last meal!
- **Only hang out in trees that aren't near power lines:** We know trees are your friends, but some are better influences than others. We work hard to trim back branches or reduce the threat of a tree (and you!) falling on a distribution line so you can enjoy all trees, but be on the lookout before you leap to a new area. Especially if it has rained

CONTACT THE NEWS TEAM

Contact our news team for information on Public Power Daily and Public Power magazine.

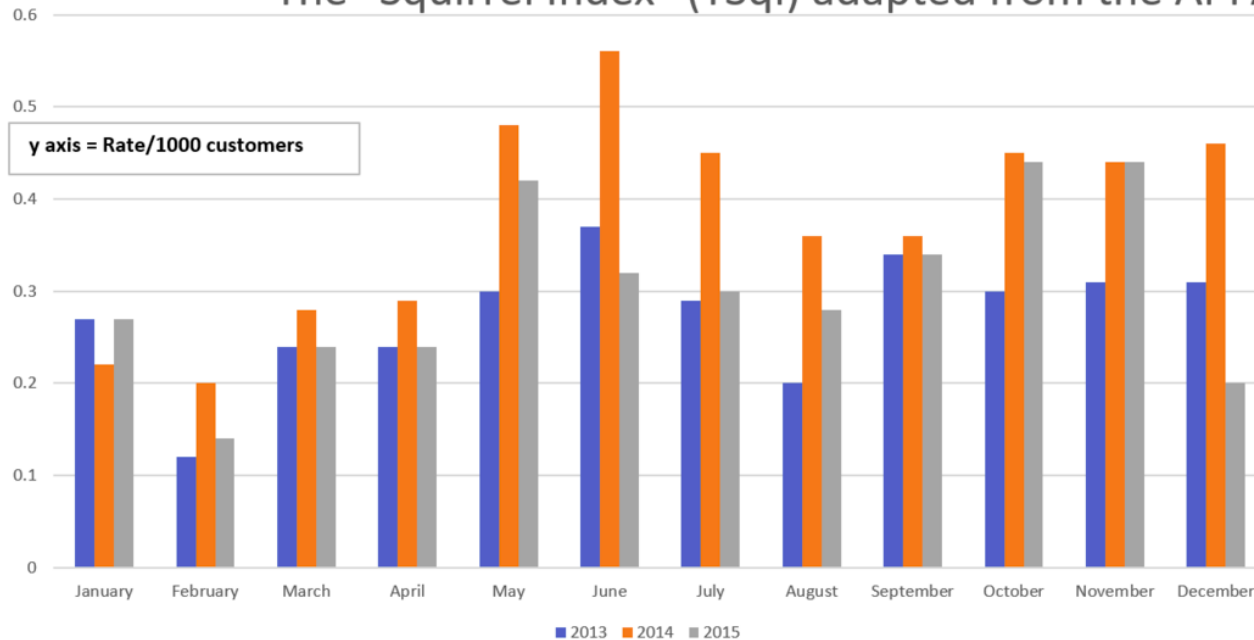
(202) 467-2947

News@PublicPower.org



Sincap endeksi

The "Squirrel Index" (TSqI) adapted from the APPA



- A squirrel took out power to Nasdaq's automated trading computer in 1987. The stock exchange went without power for 90 minutes. Twenty million trades were affected.[8][17][18] Nasdaq was shut down for about 30 minutes again in 2014 by a squirrel-induced power outage
- John C. Inglis, the former deputy director of the U.S. National Security Agency, said in 2015 that he judged the electrical grid was as likely to be paralyzed by a natural disaster as by a cyberattack and added: "[F]rankly, the No. 1 threat experienced to date by the U.S. electrical grid is squirrels."

https://en.wikipedia.org/wiki/Electrical_disruptions_caused_by_squirrels

Hidrojenli kombi

Hydrogen Gas Boiler Prototype Unveiled by Worcester Bosch

The hydrogen boiler could help to decarbonise heating and hot water systems in the UK, and can ease the transition from natural gas

By [Jack Woodfield](#) on 4 Feb 2020

Photographer: [Worcester Bosch](#)



<https://www.homebuilding.co.uk/news/hydrogen-gas-boiler-prototype-unveiled-by-worcester-bosch/>