

# EcoInternet Index: The Eco-Friendliness of Internet Infrastructure & Environmental Sustainability in Internet Governance

2026.02.08 | APIX

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[www.domain.asia](http://www.domain.asia)



Every .Asia Domain Contributes to Internet Development in Asia

Relief.Asia - Home - Mozilla Firefox  
http://relief.asia/

Relief.Asia  
緬甸風災 Myanmar Cyclone 2008.05.03  
四川大地震 Sichuan Earthquake 2008.05.12

Welcome to ISIF - Mozilla Firefox  
http://isif.asia/groups/ie

Information Society Innovation Fund - ISIF  
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www.creativecommons.asia - Mozilla Firefox  
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資訊科技資源中心 - Mozilla Firefox  
http://itrc.hkics.org.hk/prog

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資訊科技資源中心

Asia Open Source Software Centre - OSS.Asia - Home - Mozilla Firefox  
http://www.oss.asia/main.pl

OSS.ASIA  
Asia Open Source Software Centre

GI GI = One Laptop Per Child - OLPC.Asia - Mozilla Firefox  
http://www.olpc.asia

1 one laptop per child  
四川孩子的希望，中國孩子的希望  
每普一電腦

NetMission.Asia - Mozilla Firefox  
http://www.netmission.asia/main

NetMission  
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The Organizer The Program Application Exchange Opportunity Enquiries Blog Seminar Series

NET MISSION Seminar series  
NET MISSION Ambassadors program  
NET MISSION Ambassadors program  
About the Program  
TRAINING PROGRAM

Transferring data from www.netmission.asia...



**NETMISSION.asia**

Youth engagement program on Internet Governance & Digital Inclusion. Ambassadors selected from Universities are trained on global Internet issues and tasked with implementing their own projects. Alumni projects have touched Primary & Secondary School Students and Beyond.



## Sustainable Development Goal 9: Investing in ICT access and quality education to promote lasting peace



### THE 17 GOALS

|   |   |
|---|---|
| <b>1</b> NO POVERTY<br>                    | <b>2</b> ZERO HUNGER<br>                       |
| <b>3</b> GOOD HEALTH AND WELL-BEING<br>   | <b>4</b> QUALITY EDUCATION<br>                |
| <b>5</b> GENDER EQUALITY<br>             | <b>6</b> CLEAN WATER AND SANITATION<br>      |
| <b>7</b> AFFORDABLE AND CLEAN ENERGY<br> | <b>8</b> DECENT WORK AND ECONOMIC GROWTH<br> |



**THE GLOBAL GOALS**  
For Sustainable Development



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**THE GLOBAL GOALS**  
For Sustainable Development



FACTCHECKS

25 February 2020 🕒 13:08

# Factcheck: What is the carbon footprint of streaming video on Netflix?



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## Calculating the Pollution Effect of Data



By Gerry McGovern | Mar 16, 2020

CHANNEL: Digital Experiences

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# Pilot Study 2021 Group of Advisors:



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Advisor on COVID-19 Economic Recovery, UNDP*



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*Digital/energy analyst at the International Energy Agency in Paris*



**Kathryn SFORCINA**

*Global Head of Strategy, IV.AI  
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**Desiree MILOSHEIC**

*International Affairs and Policy Adviser at Afiliias  
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**Sang Min SHIM**

*Visiting research fellow, Sejong Institute  
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**David JENSEN**

*UNEP Head of Environmental Peacebuilding*



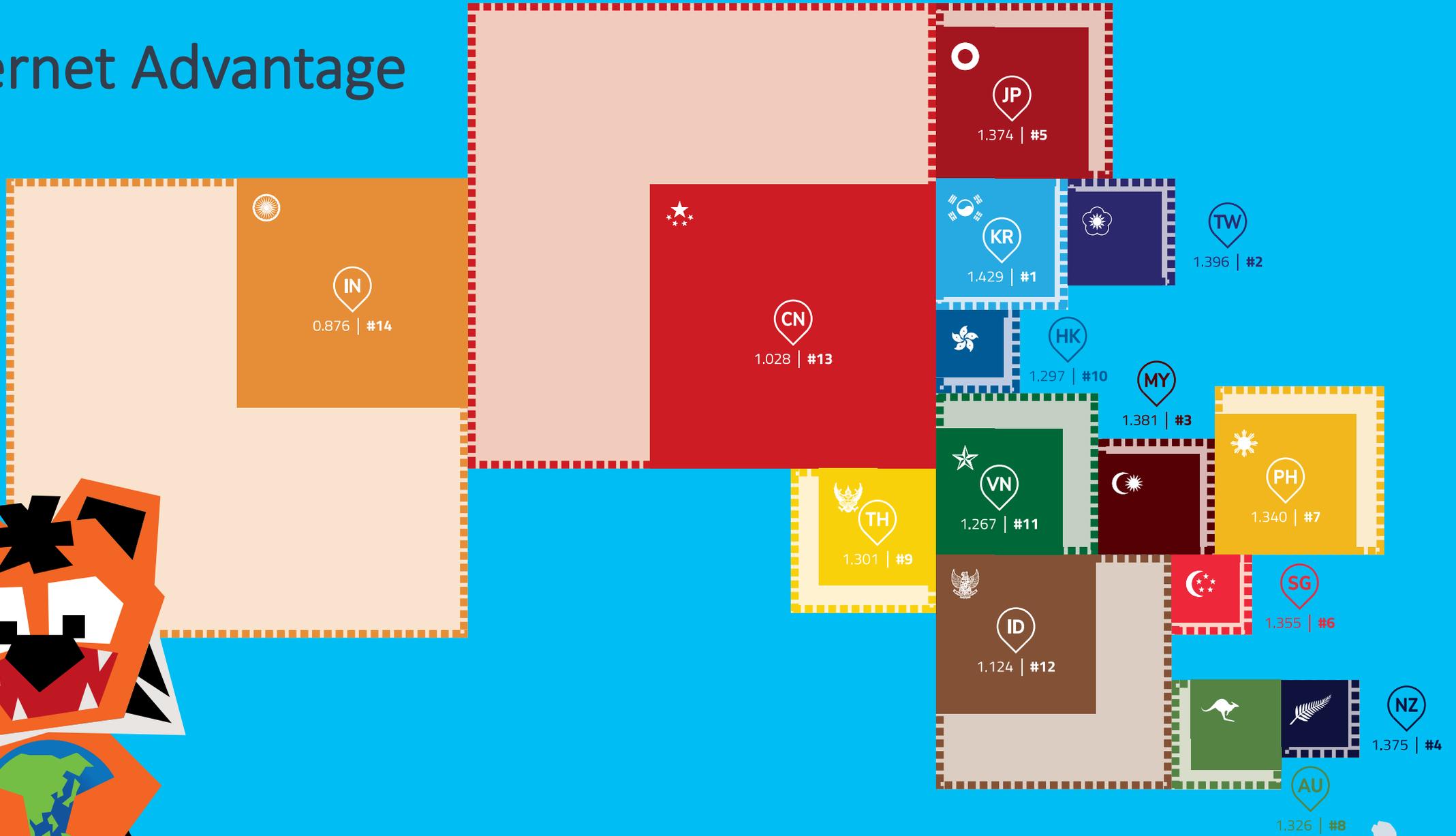
**Anna MOORE**

*Sustainability Consultant and Partnerships Manager, Eco-Business*





# The Internet Advantage



# Towards a Multi-factor Composite Indicator

## • Economy

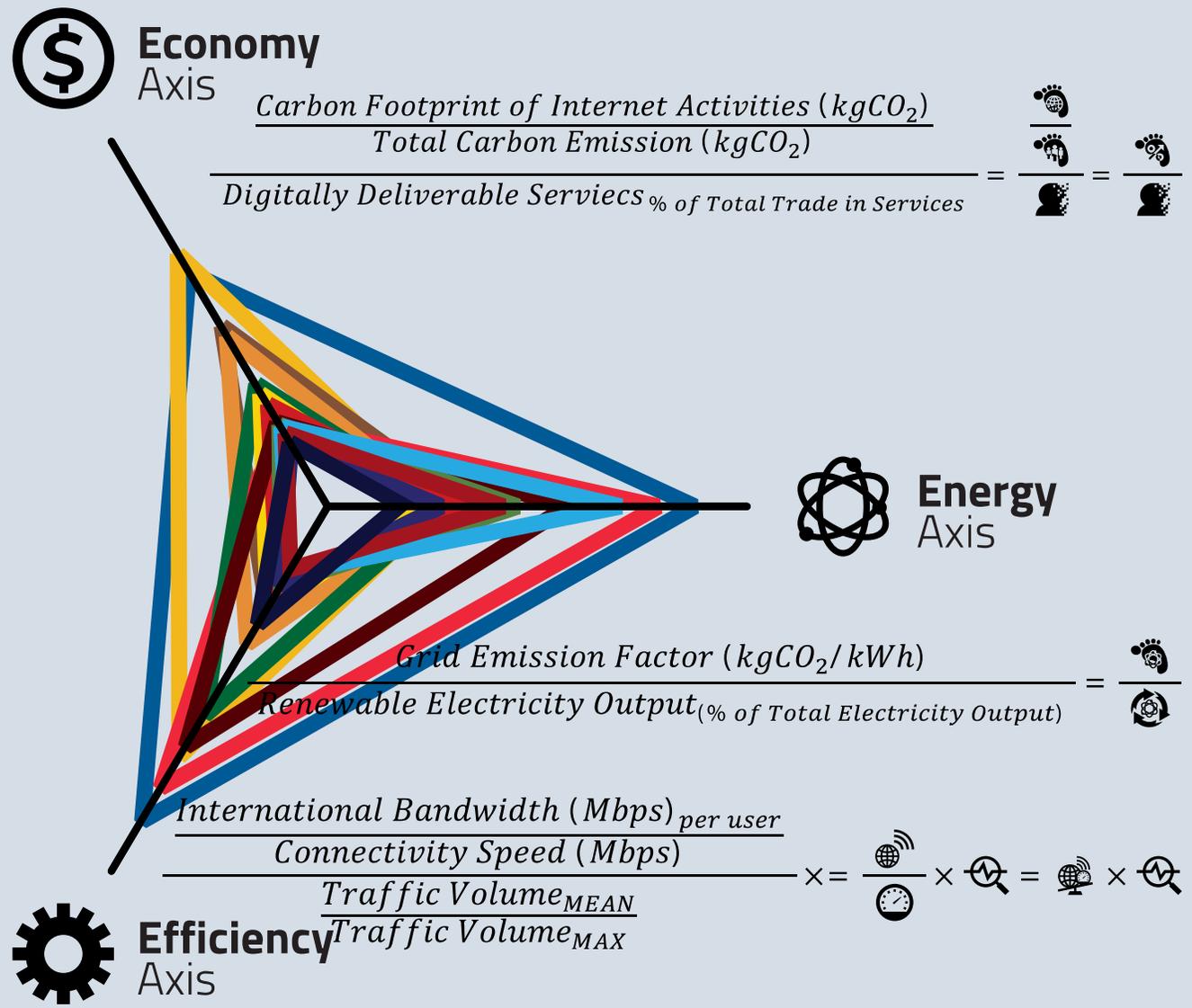
- Internet Usage patterns
- Digital Economy Consideration

## • Energy

- Grid Emission Factor
- Renewable Sources

## • Efficiency

- Network Capacity
- Speed & Variance



$$\frac{\$ \times \text{Atom} \times \sin 120^\circ}{2} + \frac{\text{Atom} \times \text{Gear} \times \sin 120^\circ}{2} + \frac{\text{Gear} \times \$ \times \sin 120^\circ}{2}$$

# The EII Model

Global





# EcoInternet\_Index

#DoMore #WasteLess

<https://ecointernet.asia>



7 AFFORDABLE AND CLEAN ENERGY

1 NO POVERTY

8 DECENT WORK AND ECONOMIC GROWTH

13 CLIMATE ACTION

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

17 PARTNERSHIPS FOR THE GOALS

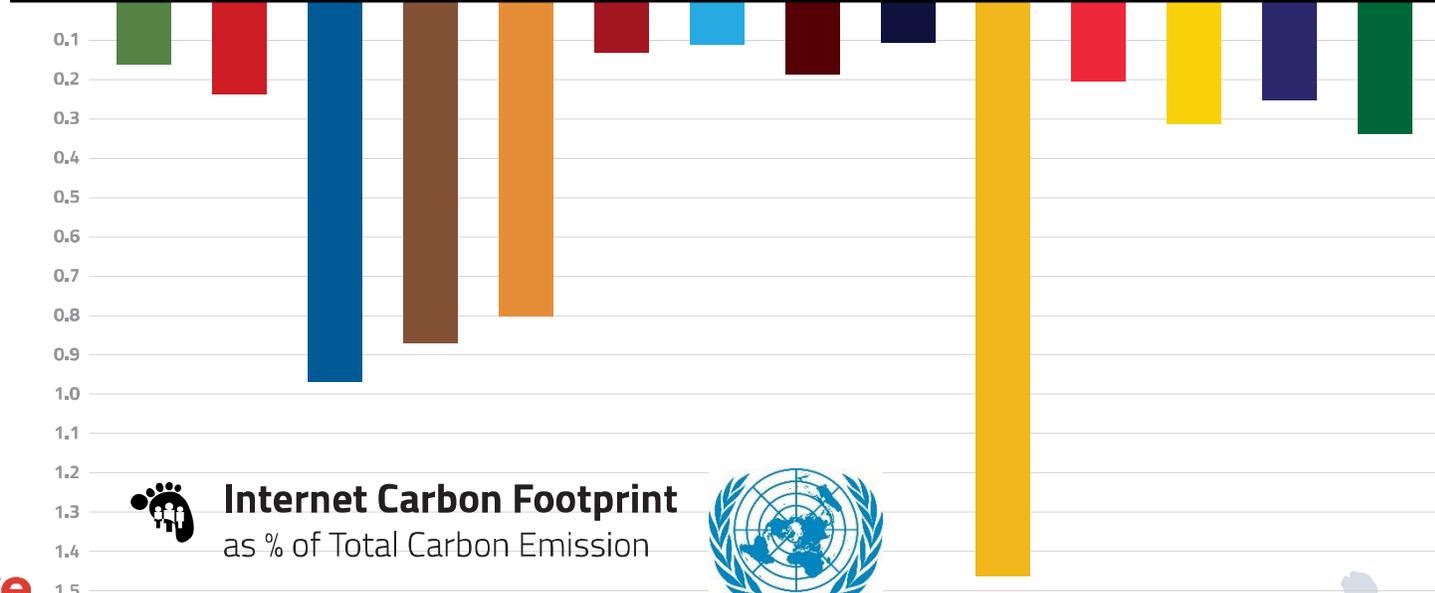
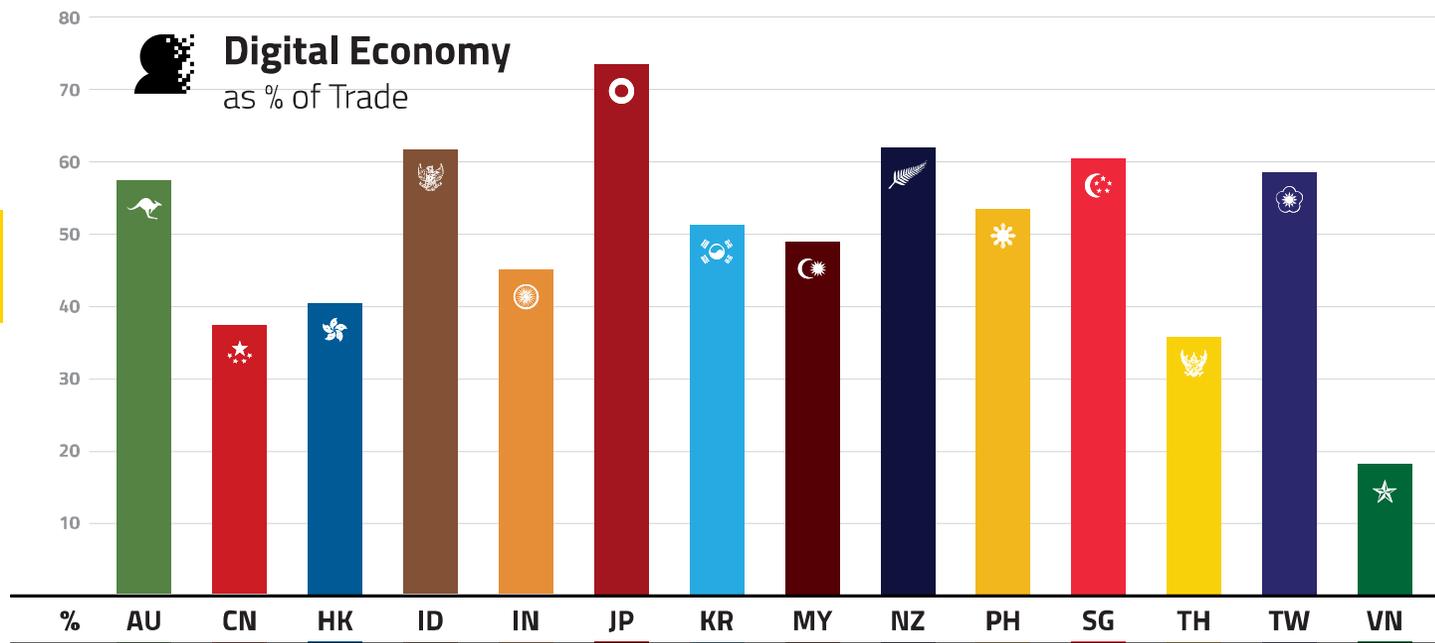
  
**THE GLOBAL GOALS**  
For Sustainable Development

## EcoInternet Pilot Study Report 2021

The COVID-19 pandemic unequivocally demonstrated that the Internet is and will likely continue to be the core and

# Economy Axis

| Rank | Country/<br>Economy | Internet<br>Carbon<br>footprint | Digital<br>Transformation | EII:<br>Economy<br>Score (Raw) | Normalized<br>Score |
|------|---------------------|---------------------------------|---------------------------|--------------------------------|---------------------|
| 1    | NZ                  | 0.06%                           | 55.43%                    | 0.115%                         | 1.000               |
| 2    | JP                  | 0.13%                           | 73.24%                    | 0.183%                         | 1.128               |
| 3    | KR                  | 0.11%                           | 47.88%                    | 0.225%                         | 1.208               |
| 4    | TW                  | 0.15%                           | 53.44%                    | 0.282%                         | 1.317               |
| 5    | AU                  | 0.16%                           | 49.19%                    | 0.322%                         | 1.394               |
| 6    | MY                  | 0.18%                           | 51.53%                    | 0.342%                         | 1.432               |
| 7    | SG                  | 0.21%                           | 62.51%                    | 0.343%                         | 1.432               |
| 8    | CN                  | 0.24%                           | 43.52%                    | 0.550%                         | 1.827               |
| 9    | TH                  | 0.31%                           | 48.03%                    | 0.640%                         | 1.997               |
| 10   | VN                  | 0.34%                           | 44.89%                    | 0.760%                         | 2.225               |
| 11   | IN                  | 0.80%                           | 60.95%                    | 1.316%                         | 3.279               |
| 12   | ID                  | 0.87%                           | 60.86%                    | 1.426%                         | 3.489               |
| 13   | HK                  | 0.97%                           | 47.80%                    | 2.027%                         | 4.629               |
| 14   | PH                  | 1.46%                           | 65.89%                    | 2.222%                         | 5.000               |



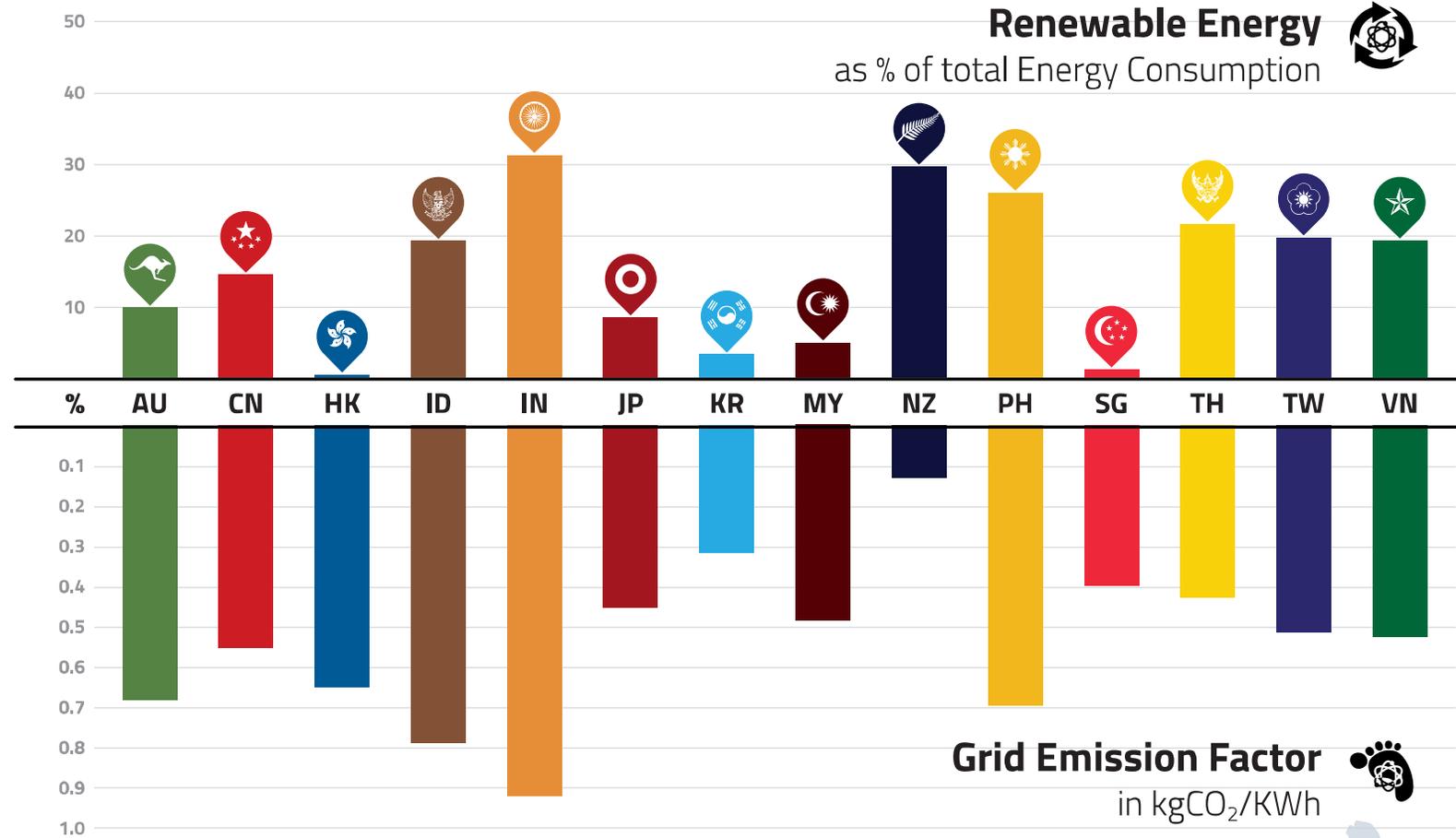
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| Rank | Country/<br>Economy | Grid Emission<br>Factor<br>(kgCO <sub>2</sub> e/kWh) | Renewable<br>Energy | EII:<br>Energy<br>Score (Raw) | Normalized<br>Score |
|------|---------------------|--|---------------------|-------------------------------|---------------------|
| 1    | NZ                  | 0.132  | 29.65%              | 0.444%                        | 1.000               |
| 2    | TH                  | 0.433  | 23.96%              | 1.807%                        | 1.019               |
| 3    | PH                  | 0.690  | 26.73%              | 2.581%                        | 1.030               |
| 4    | TW                  | 0.509  | 19.51%              | 2.609%                        | 1.031               |
| 5    | IN                  | 0.918  | 32.93%              | 2.788%                        | 1.033               |
| 6    | VN                  | 0.521  | 18.65%              | 2.794%                        | 1.033               |
| 7    | CN                  | 0.557  | 14.45%              | 3.856%                        | 1.048               |
| 8    | ID                  | 0.785  | 19.09%              | 4.111%                        | 1.052               |
| 9    | JP                  | 0.457  | 7.69%               | 5.943%                        | 1.078               |
| 10   | AU                  | 0.680  | 10.13%              | 6.713%                        | 1.089               |
| 11   | MY                  | 0.480  | 5.11%               | 9.393%                        | 1.127               |
| 12   | KR                  | 0.411  | 3.36%               | 12.241%                       | 1.167               |
| 13   | SG                  | 0.406  | 0.84%               | 48.298%                       | 1.678               |
| 14   | HK                  | 0.650  | 0.23%               | 282.61%                       | 5.000               |



# Efficiency Axis

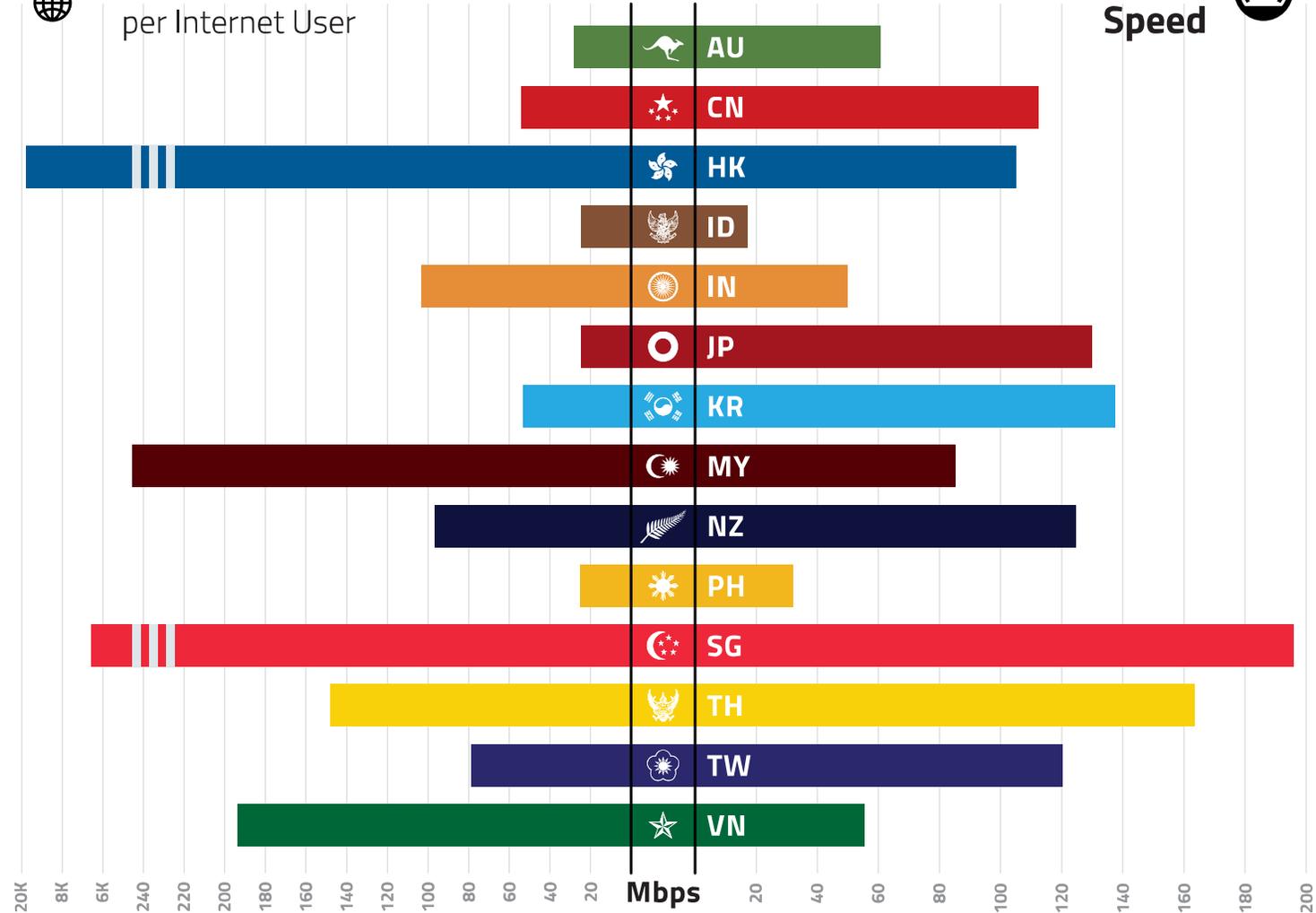


## International Bandwidth per Internet User

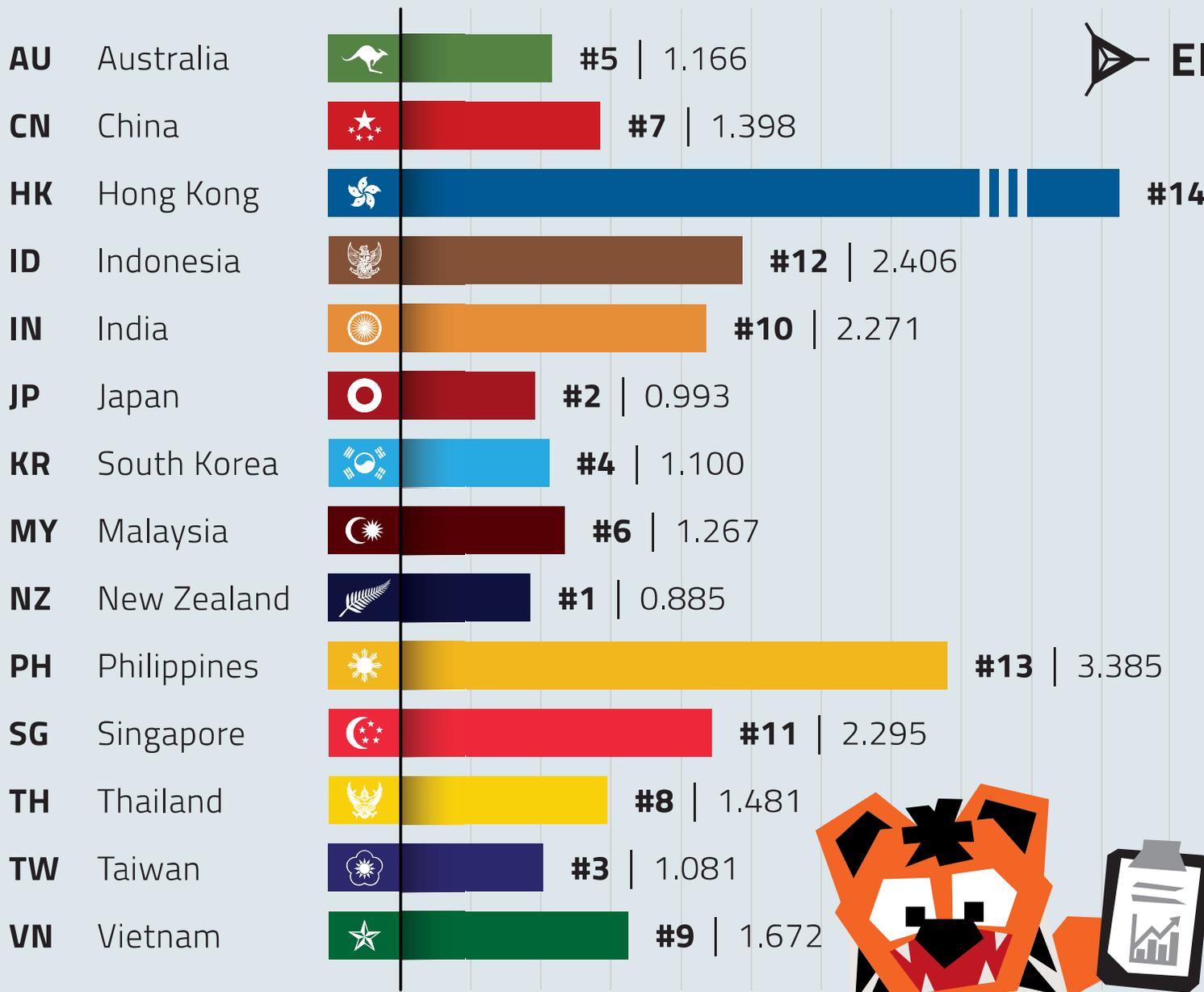
## Internet Connectivity Speed



| Rank | Country/Economy | Connectivity Quality (Speed / Bandw/ht) | Traffic Variance (Peak/Avg) | EII: Efficiency Score (Raw) | Normalized Score |
|------|-----------------|---|-----------------------------|-----------------------------|------------------|
| 1    | JP              | 5.289                                   | 1.921                       | 0.363                       | 1.000            |
| 2    | KR              | 2.814                                   | 1.502                       | 0.534                       | 1.002            |
| 3    | AU              | 1.563                                   | 1.478                       | 0.946                       | 1.006            |
| 4    | TW              | 1.531                                   | 1.610                       | 1.051                       | 1.008            |
| 5    | CN              | 2.166                                   | 2.467                       | 1.139                       | 1.009            |
| 6    | ID              | 0.723                                   | 1.346                       | 1.863                       | 1.017            |
| 7    | TH              | 1.109                                   | 2.074                       | 1.870                       | 1.017            |
| 8    | NZ              | 1.287                                   | 3.210                       | 2.495                       | 1.024            |
| 9    | IN              | 0.441                                   | 1.288                       | 2.919                       | 1.028            |
| 10   | VN              | 0.289                                   | 1.714                       | 5.939                       | 1.062            |
| 11   | MY              | 0.346                                   | 2.467                       | 7.135                       | 1.075            |
| 12   | PH              | 1.298                                   | 9.760                       | 7.520                       | 1.080            |
| 13   | SG              | 0.026                                   | 1.826                       | 69.583                      | 1.770            |
| 14   | HK              | 0.005                                   | 1.871                       | 360.16                      | 5.000            |



# EII: Overall Score



| Rank | Country/<br>Economy | EII:<br>Economy<br>Score | #  | EII:<br>Energy<br>Score | #  | EII:<br>Efficiency<br>Score | #  | Raw<br>Score | EII: Overall<br>Normalized<br>Score |
|------|---------------------|--------------------------|----|-------------------------|----|-----------------------------|----|--------------|-------------------------------------|
| 1    | NZ                  | 1.000                    | 1  | 1.000                   | 1  | 1.024                       | 8  | 0.885        | 1.000                               |
| 2    | JP                  | 1.128                    | 2  | 1.078                   | 9  | 1.000                       | 1  | 0.993        | 1.022                               |
| 3    | TW                  | 1.317                    | 4  | 1.031                   | 4  | 1.008                       | 4  | 1.081        | 1.040                               |
| 4    | KR                  | 1.208                    | 3  | 1.167                   | 12 | 1.002                       | 2  | 1.100        | 1.043                               |
| 5    | AU                  | 1.394                    | 5  | 1.089                   | 10 | 1.006                       | 3  | 1.166        | 1.057                               |
| 6    | MY                  | 1.432                    | 6  | 1.127                   | 11 | 1.077                       | 11 | 1.267        | 1.077                               |
| 7    | CN                  | 1.827                    | 8  | 1.048                   | 7  | 1.009                       | 5  | 1.398        | 1.104                               |
| 8    | TH                  | 1.997                    | 9  | 1.019                   | 2  | 1.017                       | 7  | 1.481        | 1.120                               |
| 9    | VN                  | 2.225                    | 10 | 1.033                   | 6  | 1.062                       | 10 | 1.672        | 1.159                               |
| 10   | IN                  | 3.279                    | 11 | 1.033                   | 5  | 1.028                       | 9  | 2.271        | 1.280                               |
| 11   | SG                  | 1.432                    | 7  | 1.678                   | 13 | 1.770                       | 13 | 2.295        | 1.285                               |
| 12   | ID                  | 3.489                    | 12 | 1.052                   | 8  | 1.017                       | 6  | 2.406        | 1.307                               |
| 13   | PH                  | 5.000                    | 14 | 1.030                   | 3  | 1.080                       | 12 | 3.385        | 1.505                               |
| 14   | HK                  | 4.629                    | 13 | 5.000                   | 14 | 5.000                       | 14 | 20.697       | 5.000                               |





# Overarching EcoInternet Narrative

- Carbon conscious users are important. Users and industry practices make a difference.
- Renewable energy powering the Internet and Network Efficiency
- Digital economy replacing more carbon heavy trade.
- **#DoMoreWasteLess**



# Efficiency Axis

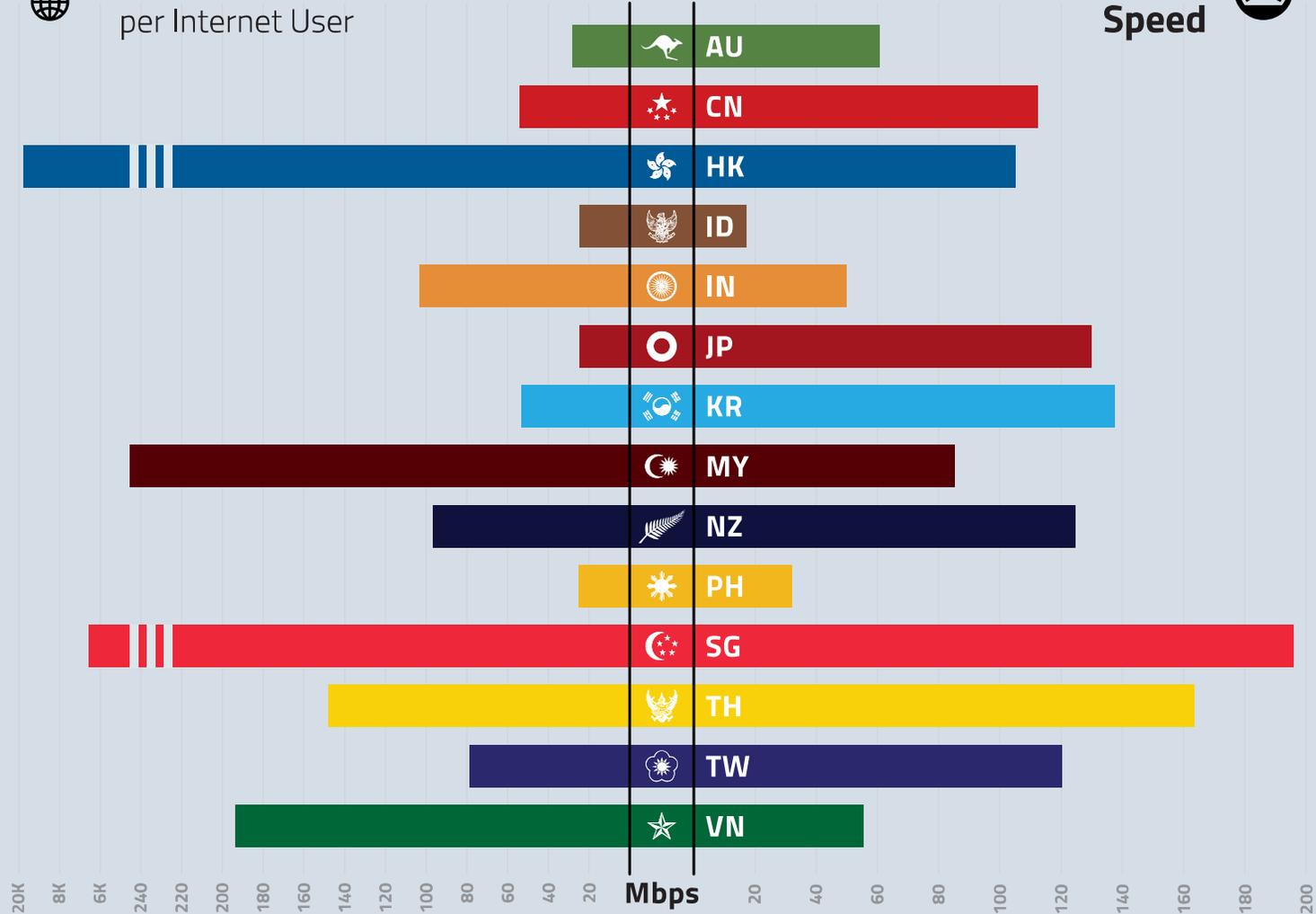


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| 5    | CN              | 2.166                                   | 2.467                       | 1.139                       | 1.009            |
| 6    | ID              | 0.723                                   | 1.346                       | 1.863                       | 1.017            |
| 7    | TH              | 1.109                                   | 2.074                       | 1.870                       | 1.017            |
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| 12   | PH              | 1.298                                   | 9.760                       | 7.520                       | 1.080            |
| 13   | SG              | 0.026                                   | 1.826                       | 69.583                      | 1.770            |
| 14   | HK              | 0.005                                   | 1.871                       | 360.16                      | 5.000            |





## INDIVIDUAL WELL-BEING



## ECONOMIC INFRASTRUCTURE



## EQUITABLE SOCIETY



## NATURAL ENVIRONMENT



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