



**Ministerio de Minas y Energía MME**

**Unidad de Planeación Minero Energética UPME**

**Subdirección de Energía Eléctrica**

**Informe de Registro de Proyectos de Generación**  
(corte a diciembre 31 de 2020)

**Inscripción según  
requisitos de las Resoluciones  
UPME No. 0520, No. 0638 de 2007 y No. 0143 de 2016**



**El futuro  
es de todos**

**Minenergía**

Informe de  
**REGISTRO DE PROYECTOS DE GENERACIÓN**

Inscripción según los requisitos de las Resoluciones **UPME**

No. 0520 de 2007

No. 0638 de 2007

No. 0143 de 2016

**República de Colombia**  
Ministerio de Minas y Energía  
Unidad de Planeación Minero Energética

**Ministra de Minas y Energía**  
María Fernanda Suárez

**Director General UPME**  
Ricardo Ramírez Carrero

**Subdirector de Energía UPME**  
Javier Martínez Gil



**Equipo UPME**

Luis Alfredo Hernández Beleño  
Júan Carlos Aponte Gutierrez  
Alfonso Segura

**Apoyo Editorial**

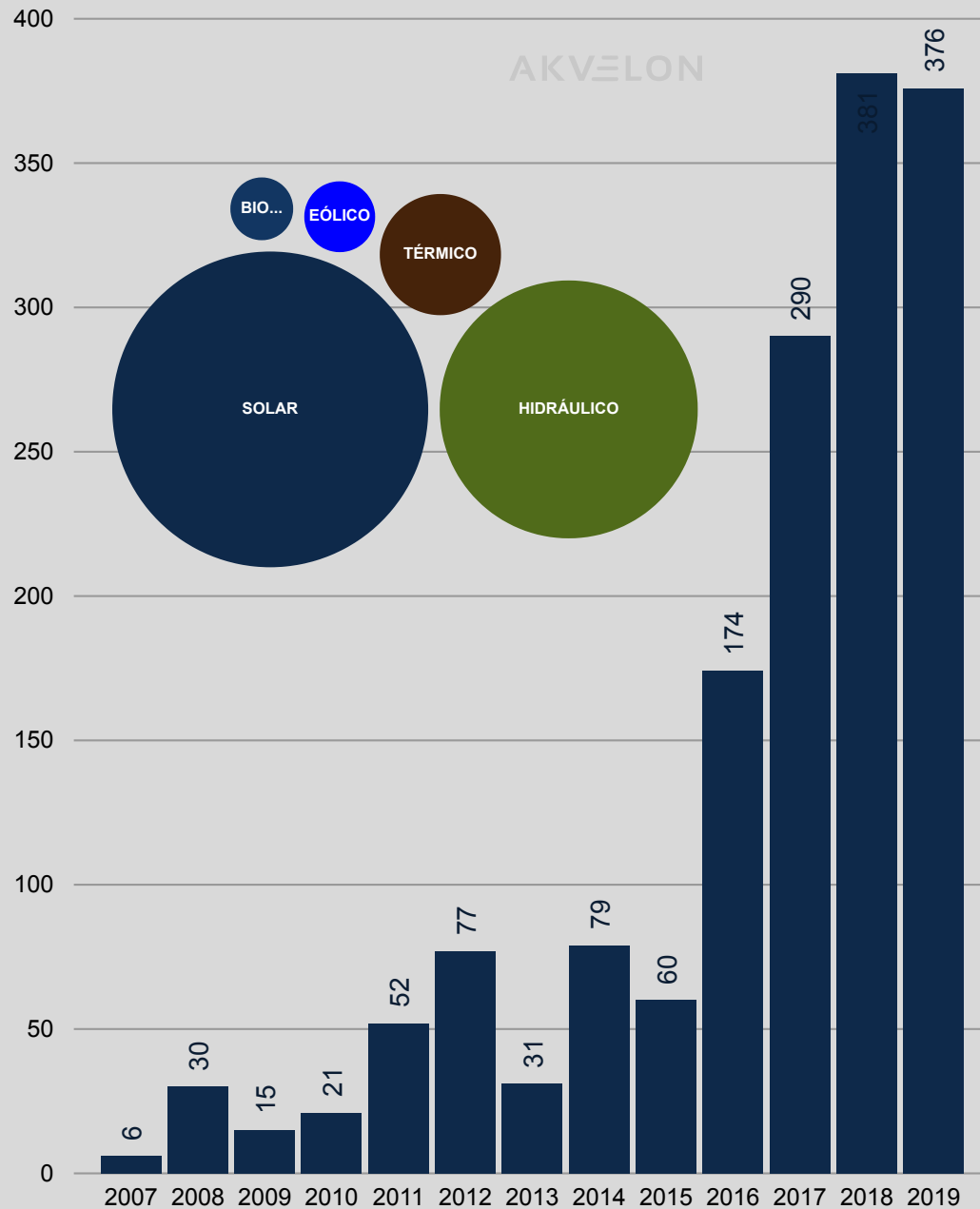
Angie Katherine Torres  
Oliver DÍaz Iglesias

**Diseño y Diagramación**

Diseño inhouse UPME

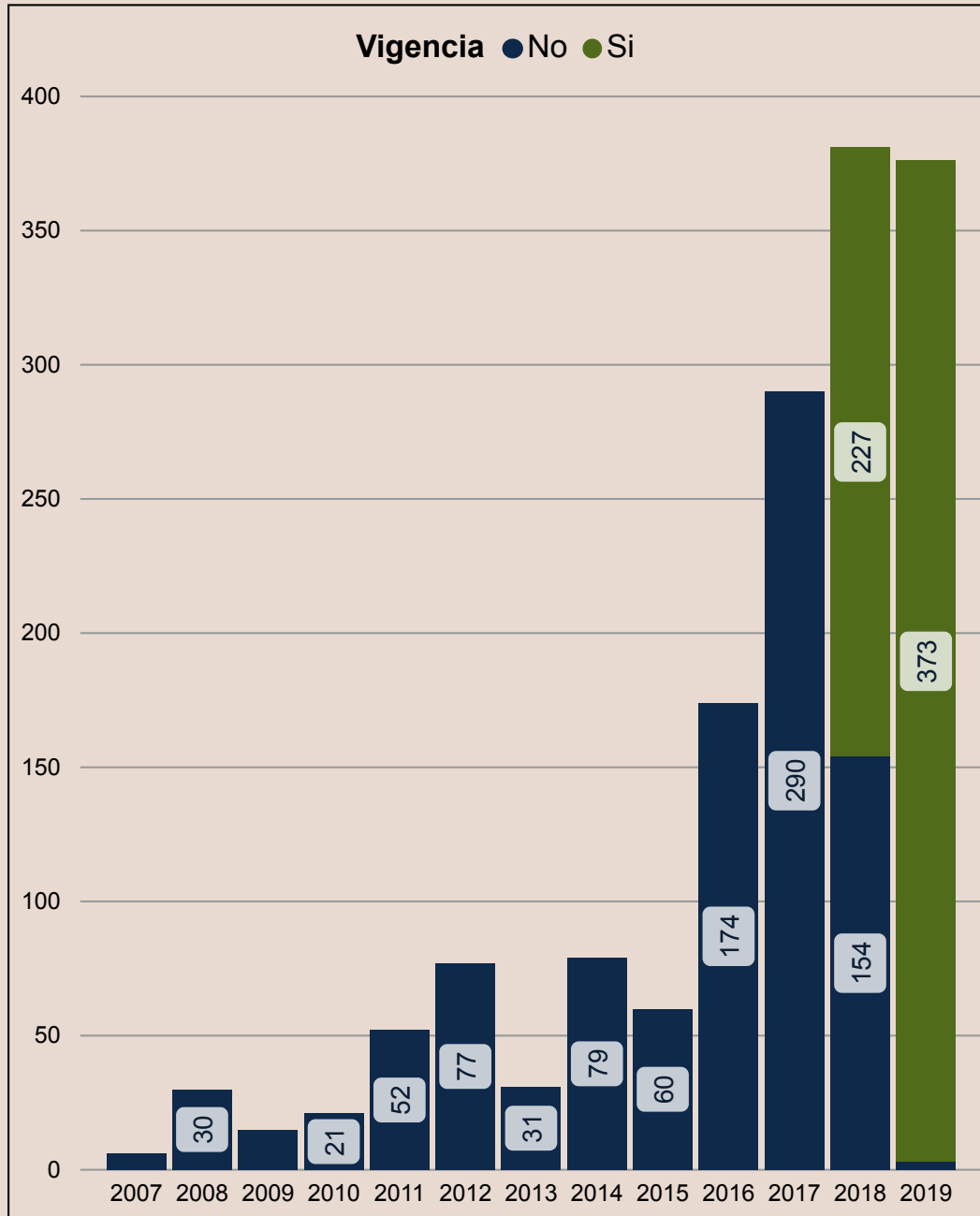
Hecho en Colombia  
**Año 2019**

Número de proyectos presentados

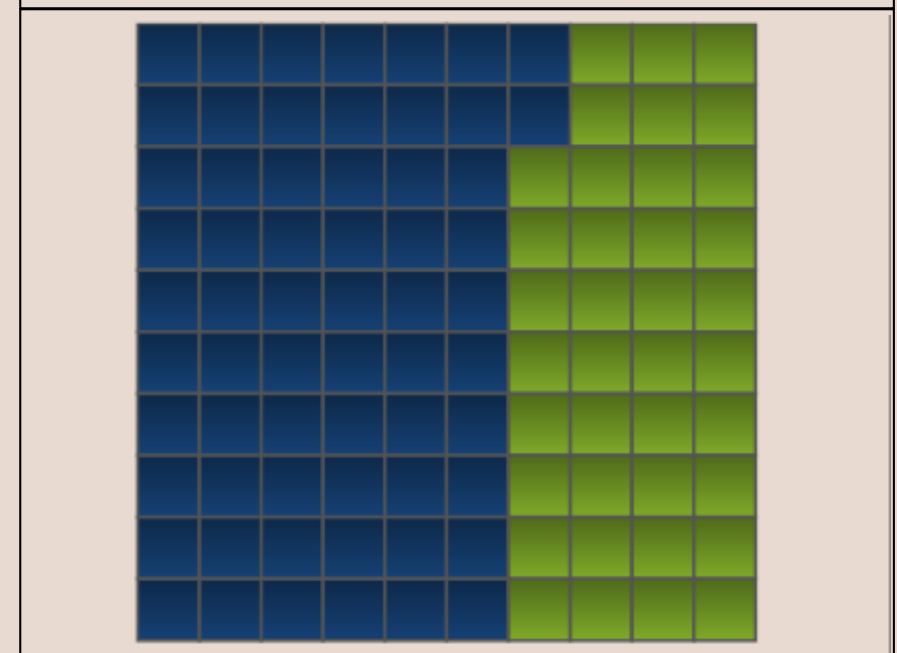
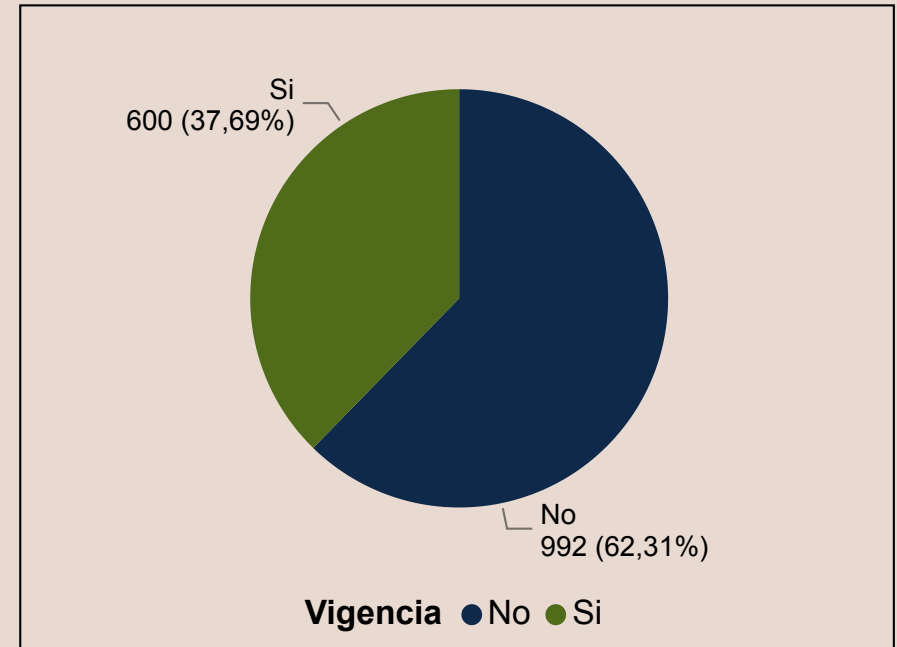


| Year        | BIOMASA   | EÓLICO    | GEOTÉRMICO | HIDRÁULICO | OTROS    | SOLAR      | TÉRMICO    | Total       |
|-------------|-----------|-----------|------------|------------|----------|------------|------------|-------------|
| 2007        |           |           |            | 4          |          |            | 2          | 6           |
| 2008        |           |           |            | 9          |          |            | 21         | 30          |
| 2009        | 1         |           |            | 14         |          |            |            | 15          |
| 2010        |           |           |            | 20         |          |            | 1          | 21          |
| 2011        | 1         |           |            | 33         |          |            | 18         | 52          |
| 2012        |           | 1         |            | 76         |          |            |            | 77          |
| 2013        | 1         |           |            | 27         |          |            | 3          | 31          |
| 2014        | 2         |           |            | 73         |          | 1          | 3          | 79          |
| 2015        |           | 4         | 1          | 47         |          |            | 8          | 60          |
| 2016        | 8         | 1         |            | 50         |          | 110        | 5          | 174         |
| 2017        | 6         | 3         |            | 56         | 1        | 222        | 2          | 290         |
| 2018        | 9         | 8         |            | 79         |          | 253        | 32         | 381         |
| 2019        | 5         | 25        |            | 69         |          | 249        | 28         | 376         |
| <b>Tota</b> | <b>33</b> | <b>42</b> | <b>1</b>   | <b>557</b> | <b>1</b> | <b>835</b> | <b>123</b> | <b>1592</b> |

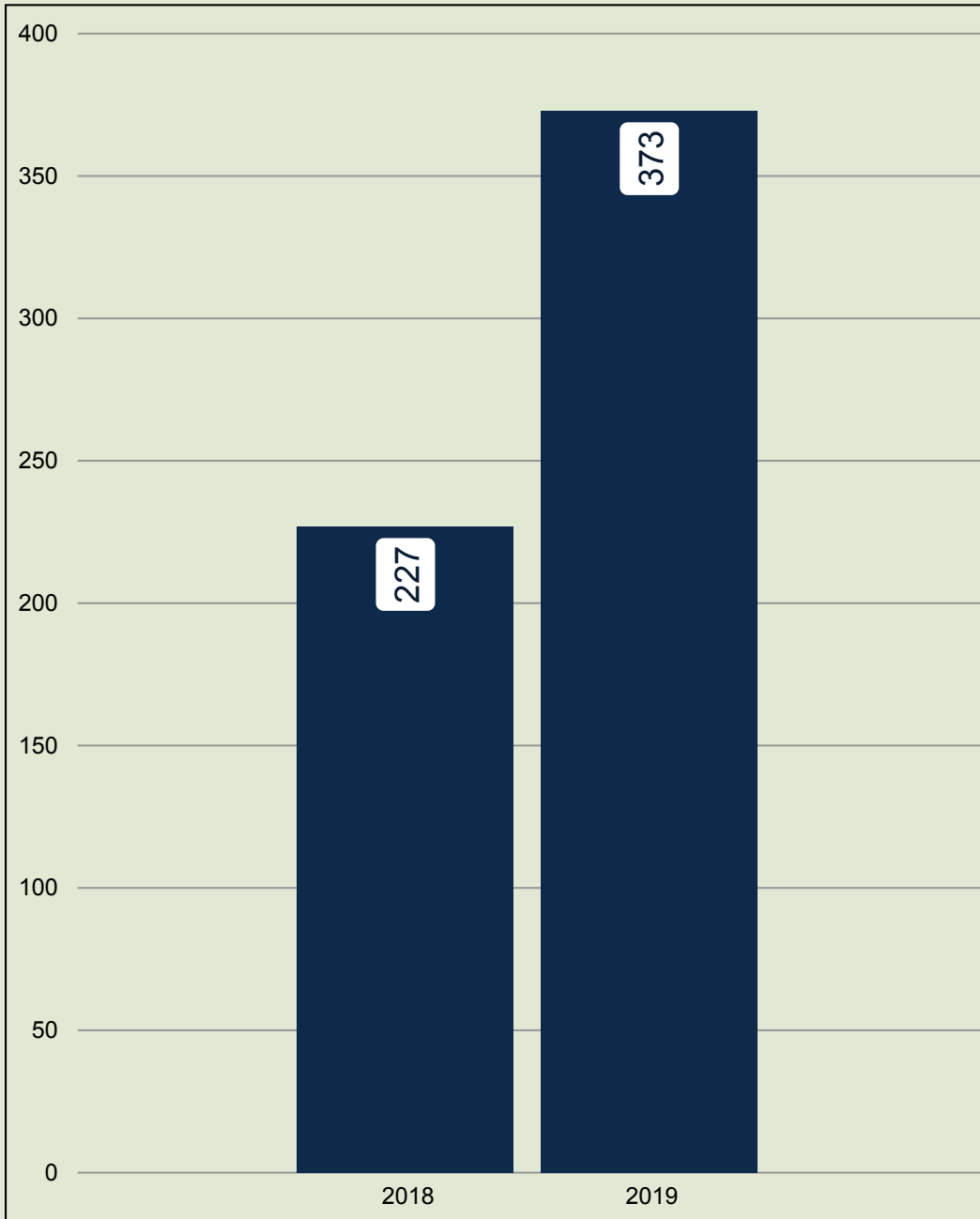
Número de proyectos presentados según su vigencia



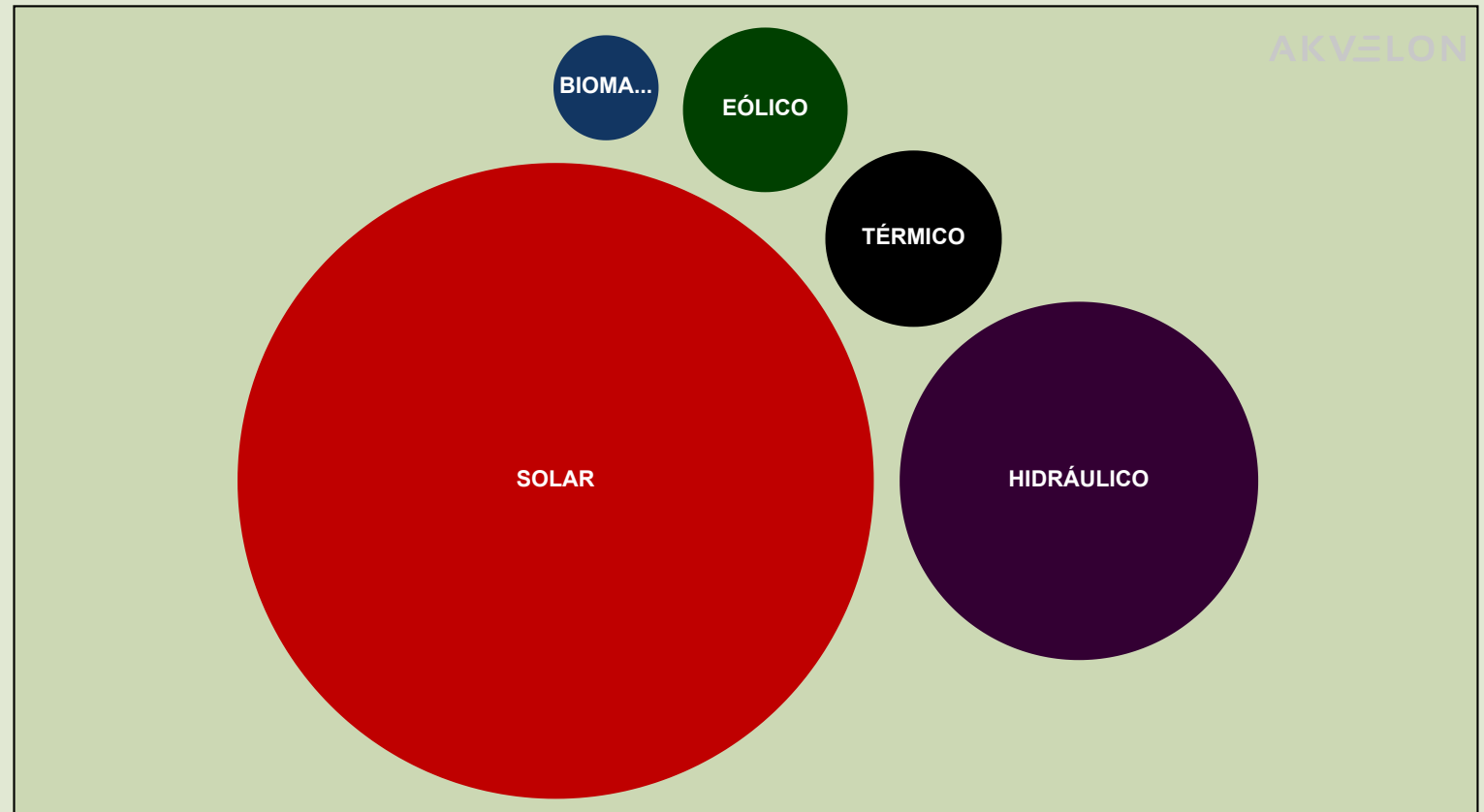
| Year         | No         | Si         | Total       |
|--------------|------------|------------|-------------|
| 2007         | 6          |            | 6           |
| 2008         | 30         |            | 30          |
| 2009         | 15         |            | 15          |
| 2010         | 21         |            | 21          |
| 2011         | 52         |            | 52          |
| 2012         | 77         |            | 77          |
| 2013         | 31         |            | 31          |
| 2014         | 79         |            | 79          |
| 2015         | 60         |            | 60          |
| 2016         | 174        |            | 174         |
| 2017         | 290        |            | 290         |
| 2018         | 154        | 227        | 381         |
| 2019         | 3          | 373        | 376         |
| <b>Total</b> | <b>992</b> | <b>600</b> | <b>1592</b> |



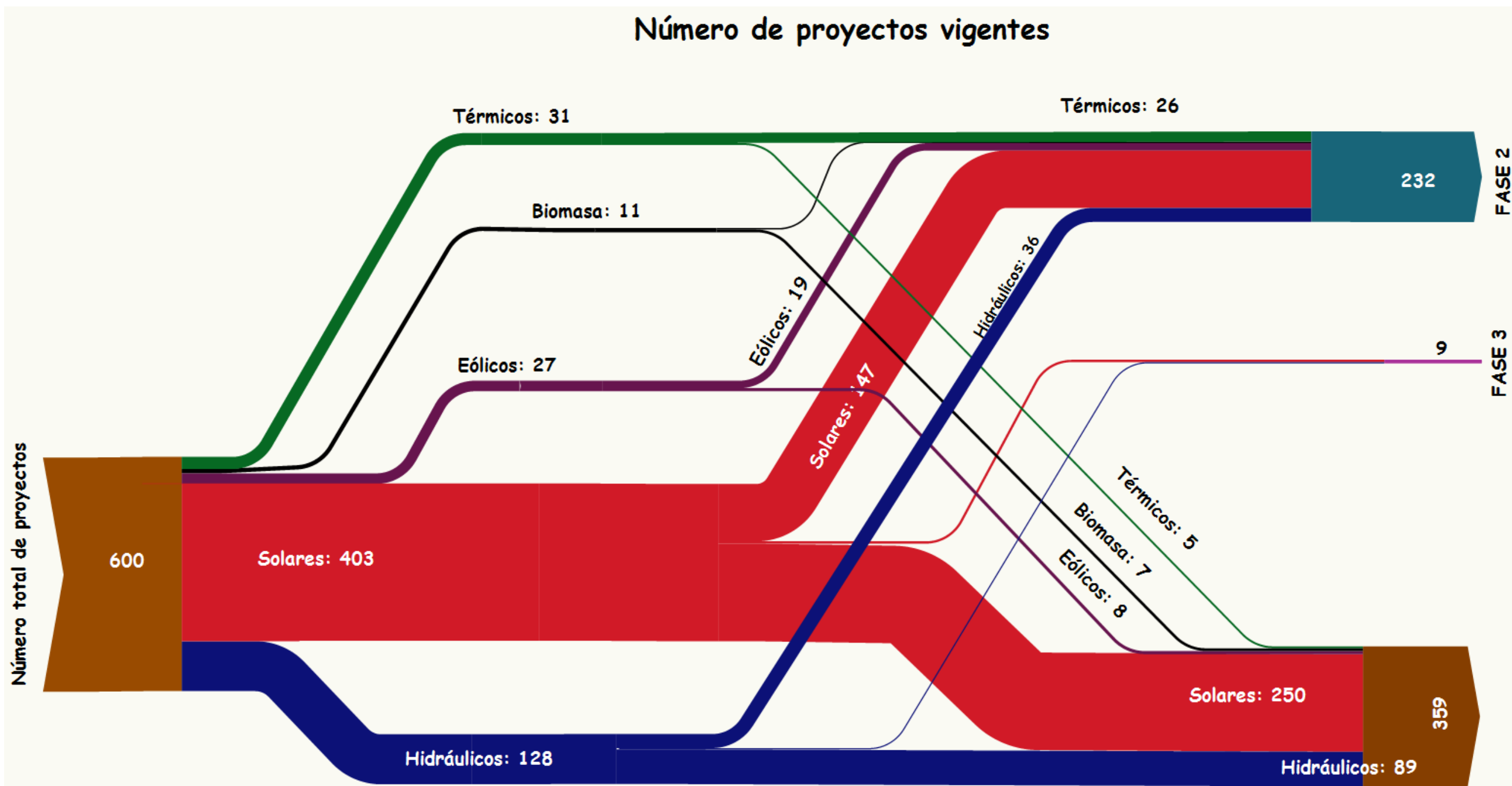
Número de proyectos vigentes



| Year         | BIOMASA   | EÓLICO    | HIDRÁULICO | SOLAR      | TÉRMICO   | Total      |
|--------------|-----------|-----------|------------|------------|-----------|------------|
| 2018         | 6         | 2         | 59         | 157        | 3         | 227        |
| 2019         | 5         | 25        | 69         | 246        | 28        | 373        |
| <b>Total</b> | <b>11</b> | <b>27</b> | <b>128</b> | <b>403</b> | <b>31</b> | <b>600</b> |



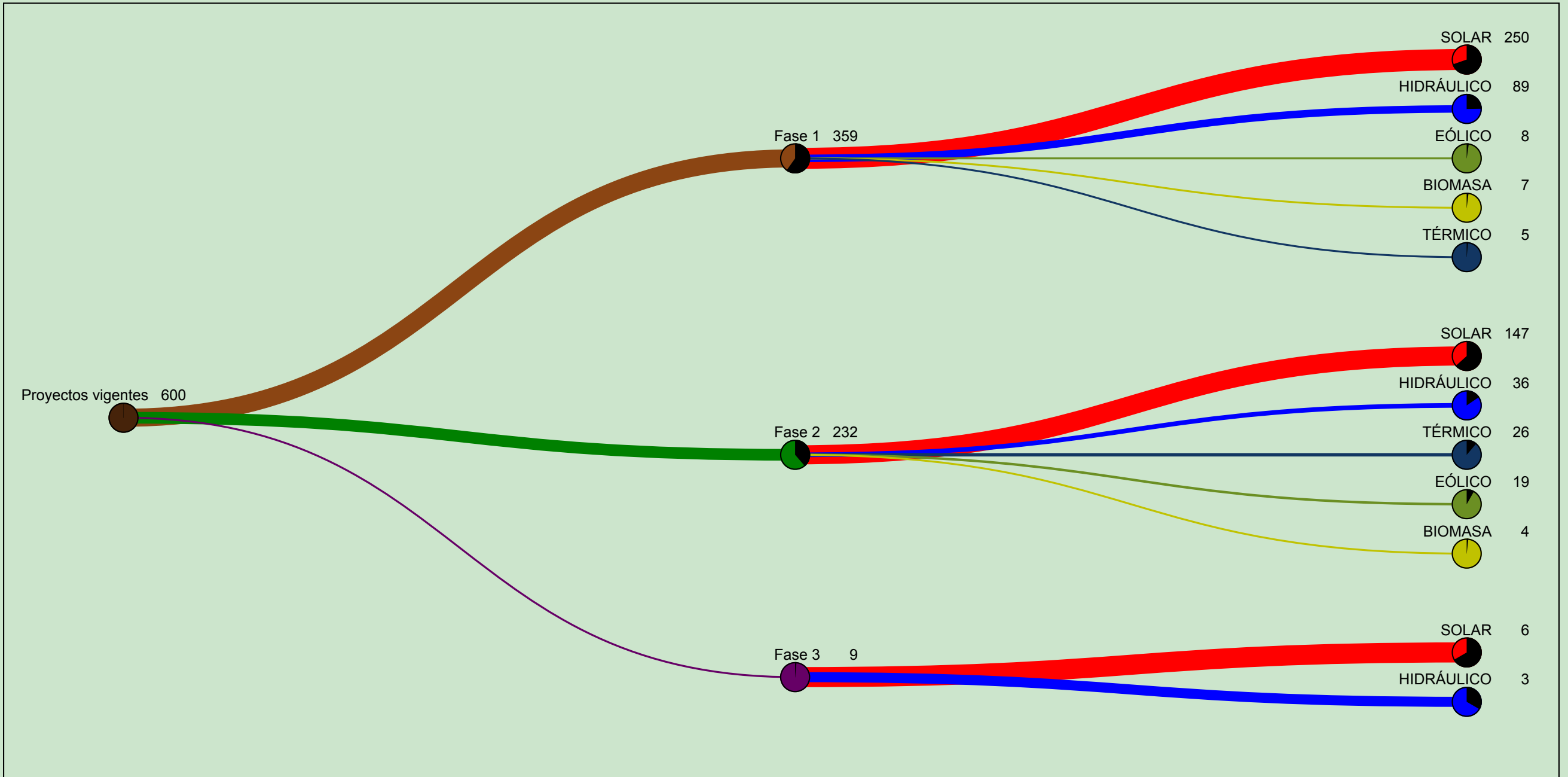
### Número de proyectos vigentes



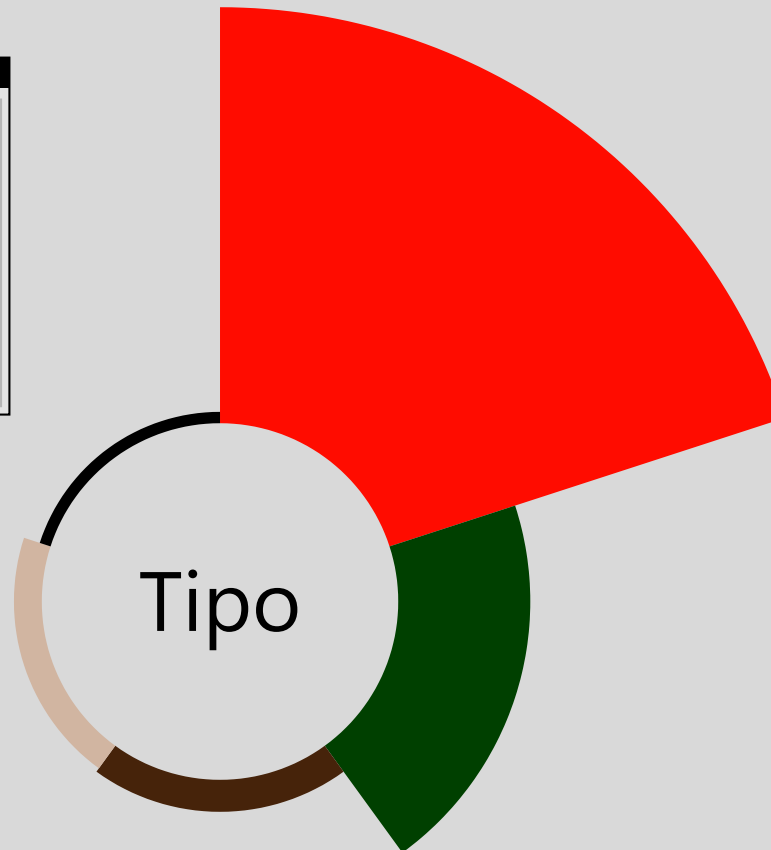
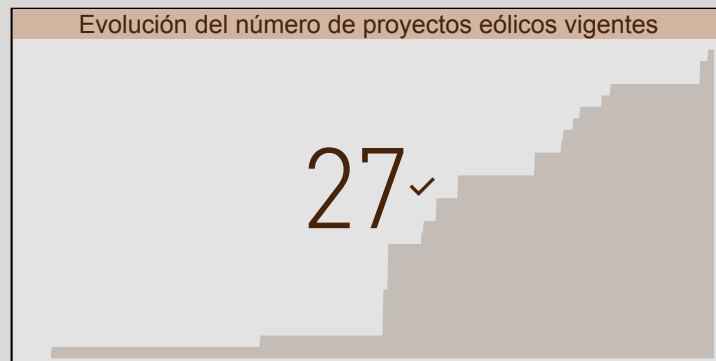
Número de proyectos vigentes



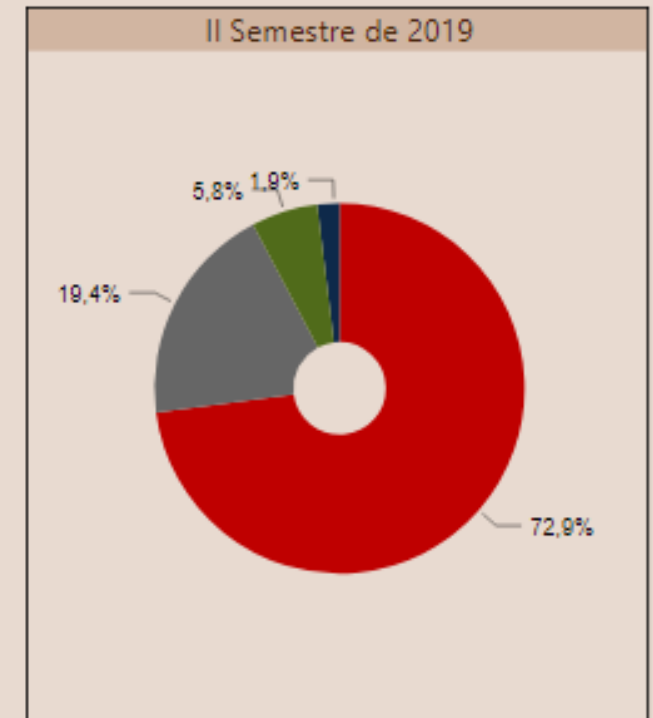
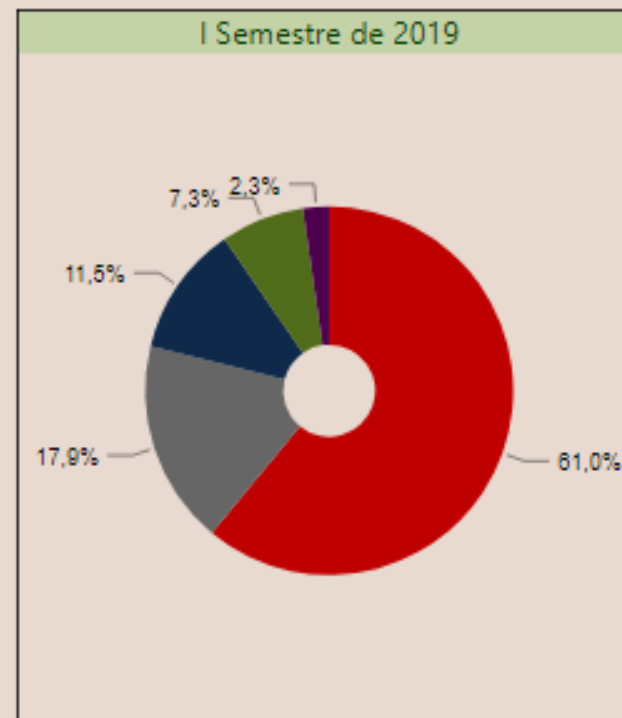
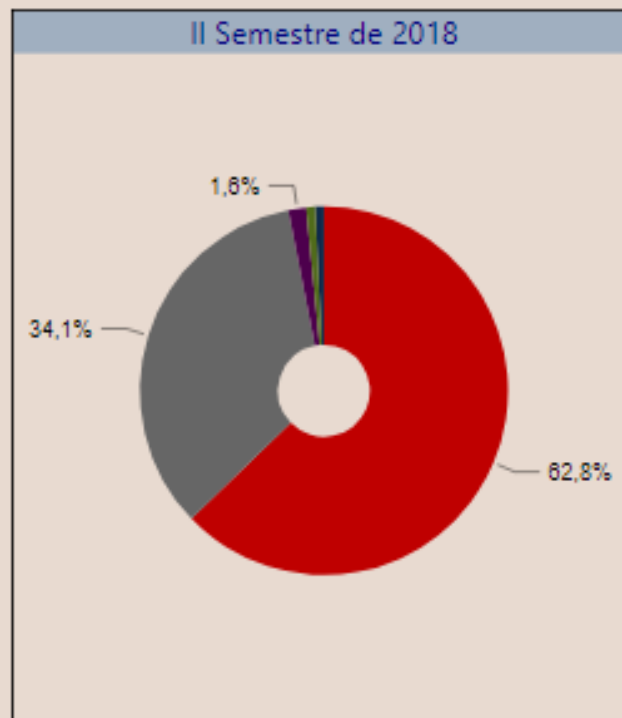
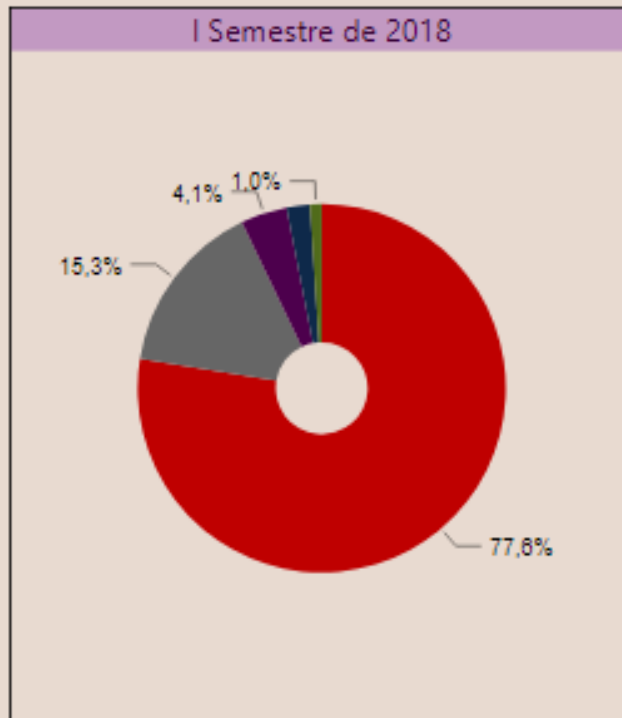
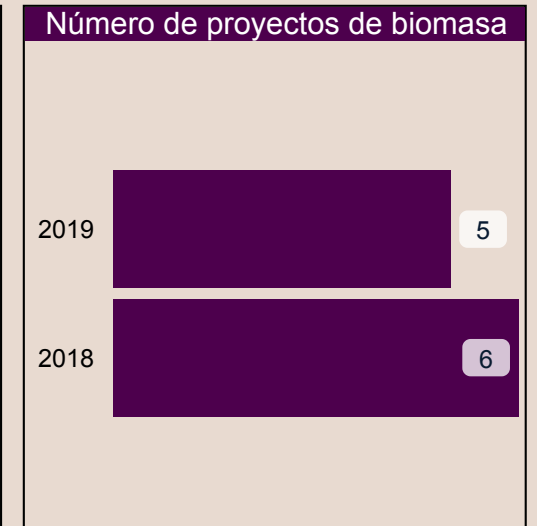
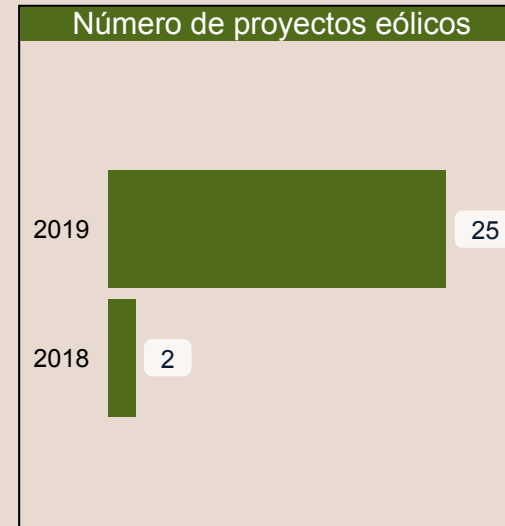
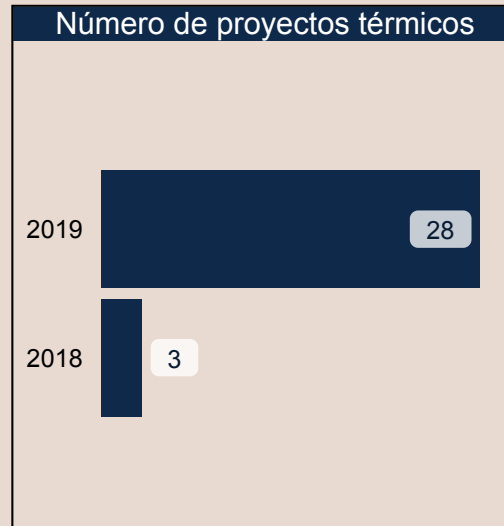
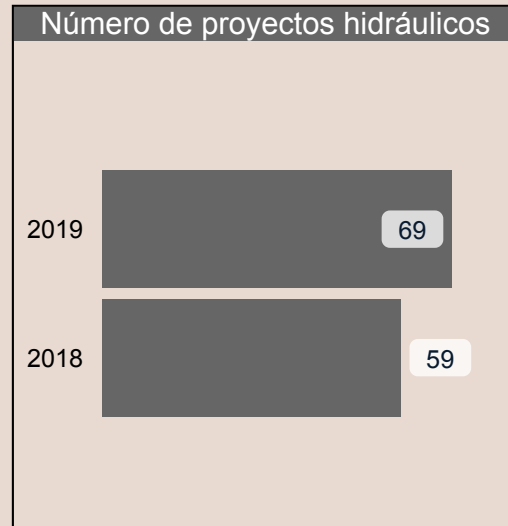
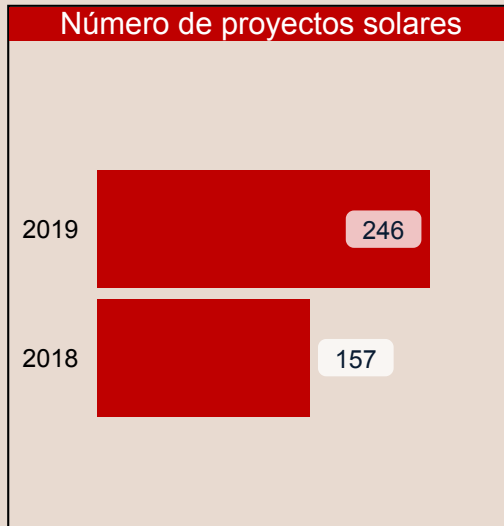
Número de proyectos vigentes



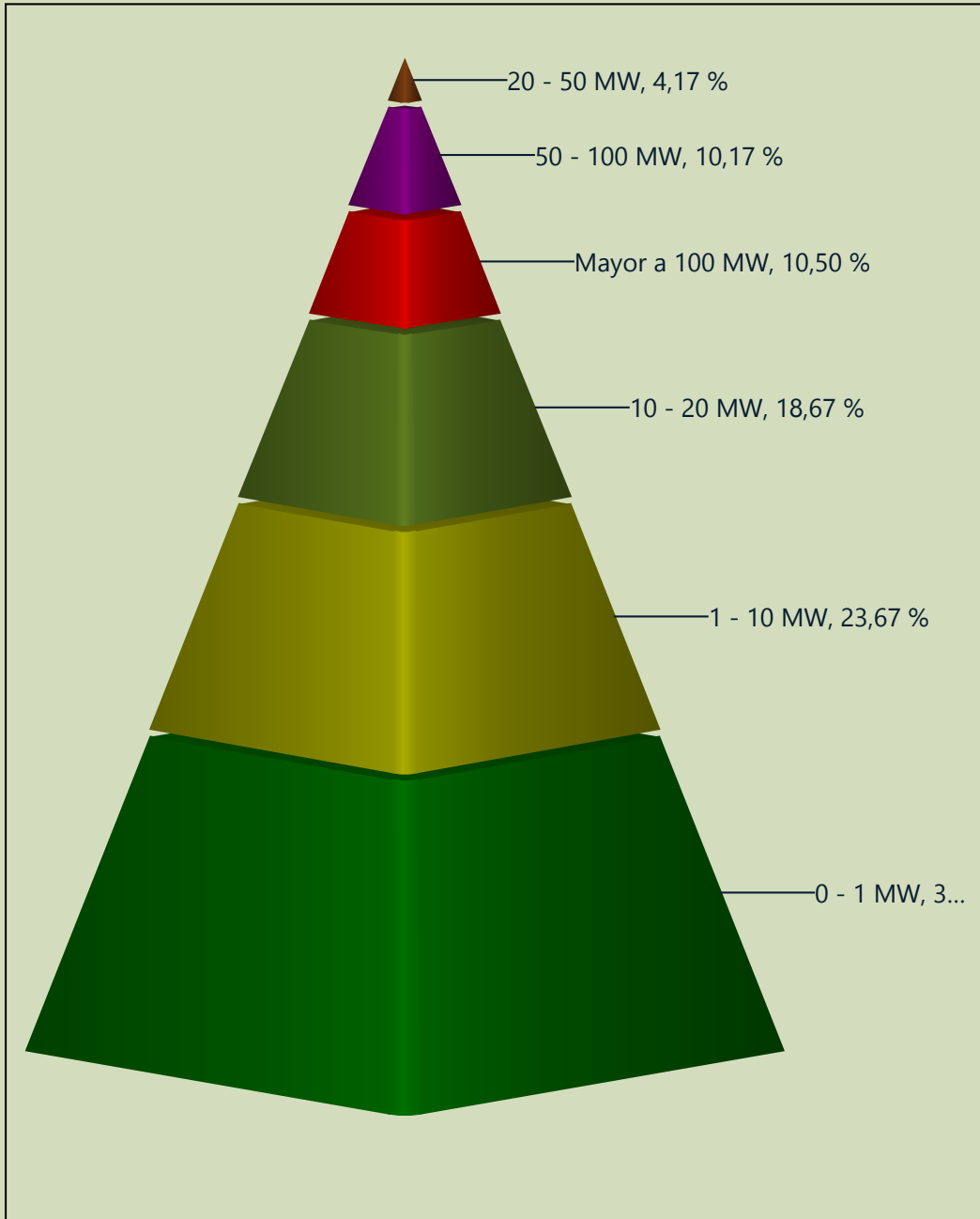
Número de proyectos vigentes por tipo 2017 - 2019



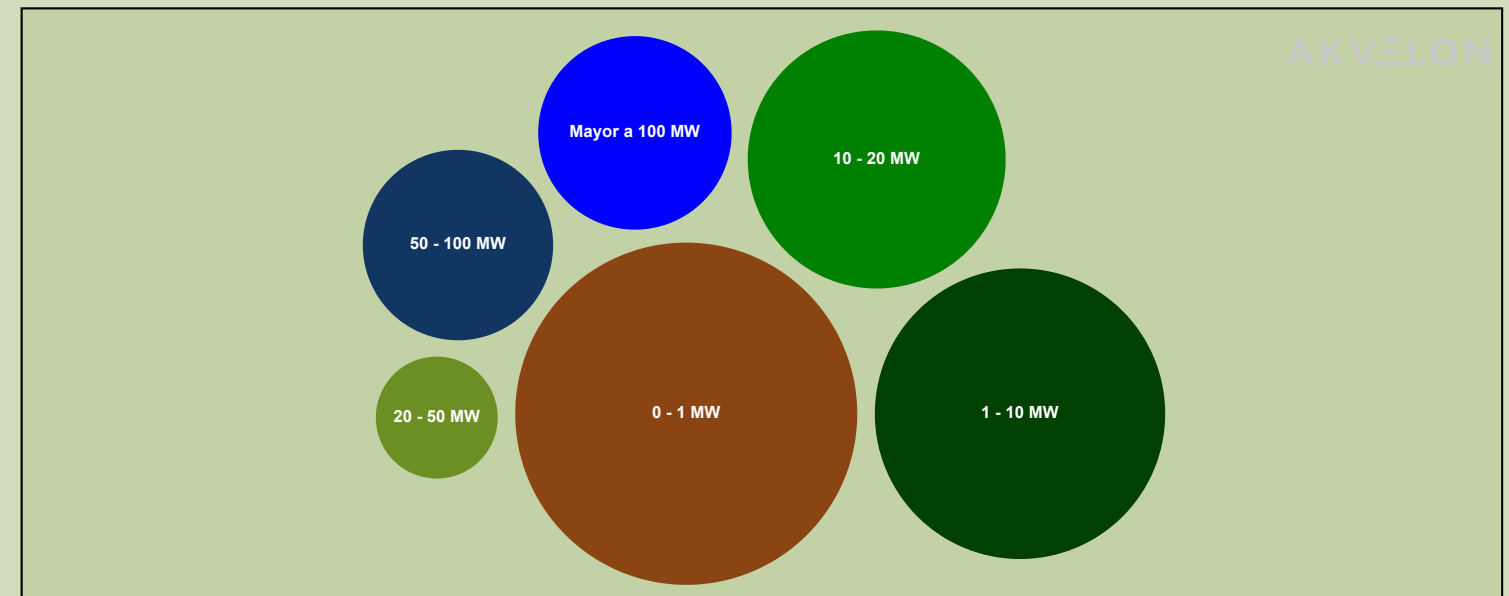
Número de proyectos vigentes



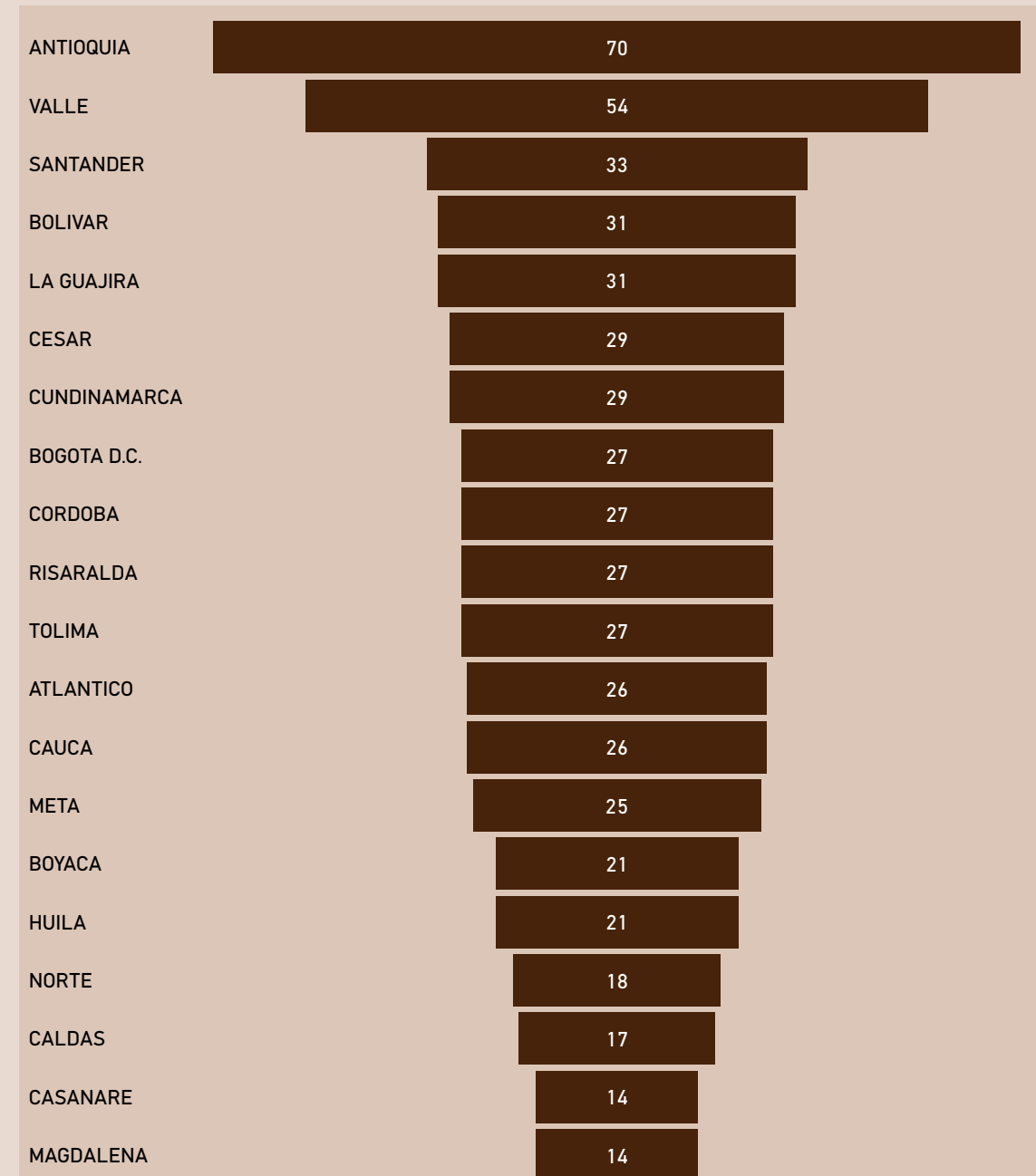
Número de proyectos vigentes por rango de potencia



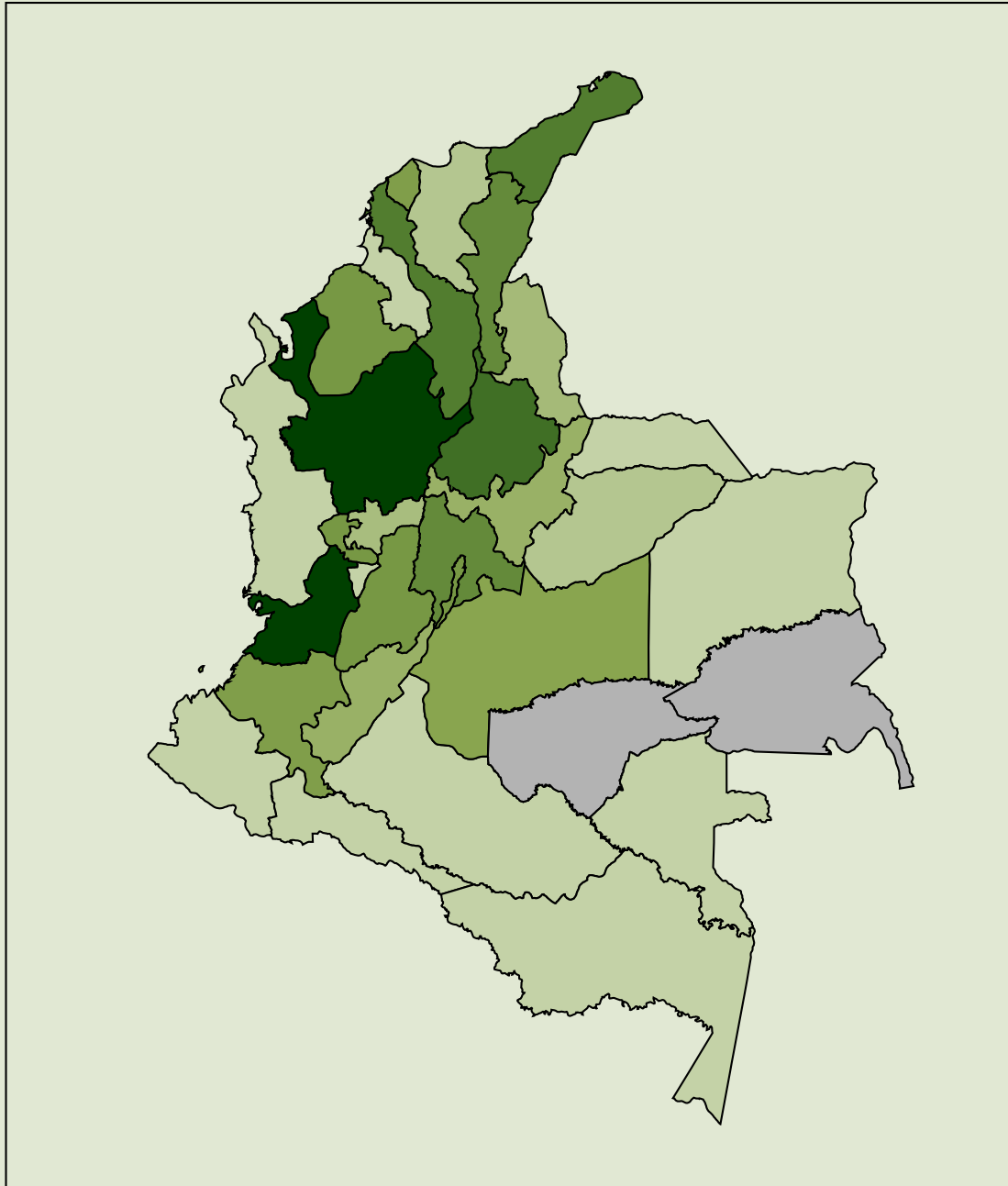
| Rango          | BIOMASA   | EÓLICO    | HIDRÁULICO | SOLAR      | TÉRMICO   | Total      |
|----------------|-----------|-----------|------------|------------|-----------|------------|
| 0 - 1 MW       | 5         |           | 1          | 190        | 1         | 197        |
| 1 - 10 MW      | 5         | 3         | 69         | 65         |           | 142        |
| 10 - 20 MW     |           |           | 34         | 74         | 4         | 112        |
| 20 - 50 MW     | 1         | 1         | 8          | 11         | 4         | 25         |
| 50 - 100 MW    |           | 12        | 9          | 30         | 10        | 61         |
| Mayor a 100 MW |           | 11        | 7          | 33         | 12        | 63         |
| <b>Total</b>   | <b>11</b> | <b>27</b> | <b>128</b> | <b>403</b> | <b>31</b> | <b>600</b> |



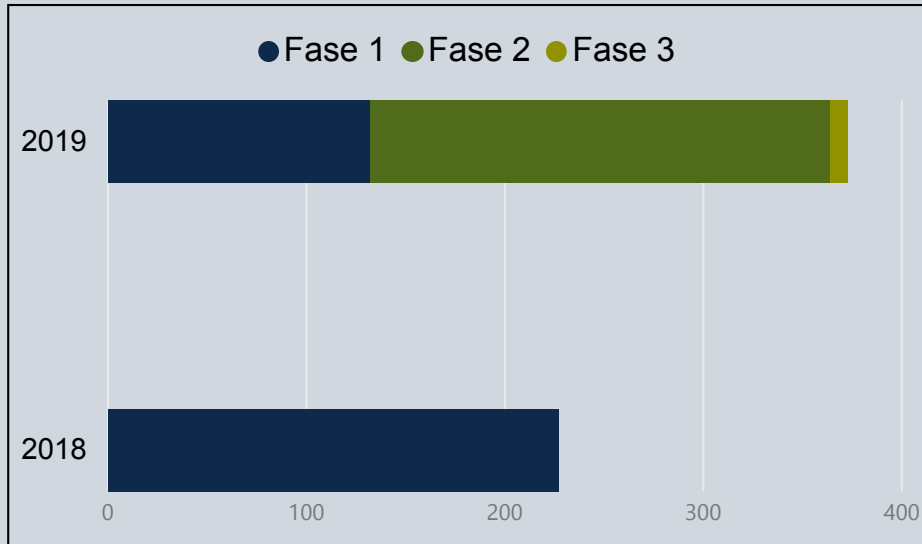
| NC Departamento | BIOMASA   | EÓLICO    | HIDRÁULICO | SOLAR      | TÉRMICO   | Total      |
|-----------------|-----------|-----------|------------|------------|-----------|------------|
| ANTIOQUIA       |           |           | 48         | 21         | 1         | 70         |
| VALLE           |           |           | 2          | 47         | 5         | 54         |
| SANTANDER       | 2         |           | 3          | 26         | 2         | 33         |
| BOLIVAR         |           | 2         |            | 24         | 5         | 31         |
| LA GUAJIRA      |           | 17        |            | 14         |           | 31         |
| CESAR           |           |           |            | 29         |           | 29         |
| CUNDINAMARCA    | 1         |           | 3          | 25         |           | 29         |
| BOGOTA D.C.     | 3         |           |            | 22         | 2         | 27         |
| CORDOBA         |           |           |            | 24         | 3         | 27         |
| RISARALDA       |           |           | 18         | 9          |           | 27         |
| TOLIMA          | 2         |           | 8          | 17         |           | 27         |
| ATLANTICO       |           | 3         |            | 21         | 2         | 26         |
| CAUCA           |           |           | 18         | 8          |           | 26         |
| META            | 1         |           |            | 23         | 1         | 25         |
| BOYACA          |           | 3         | 5          | 13         |           | 21         |
| HUILA           |           |           |            | 21         |           | 21         |
| NORTE           | 1         |           | 2          | 14         | 1         | 18         |
| CALDAS          |           |           | 10         | 7          |           | 17         |
| CASANARE        | 1         |           |            | 6          | 7         | 14         |
| MAGDALENA       |           | 2         |            | 10         | 2         | 14         |
| SUCRE           |           |           |            | 9          |           | 9          |
| QUINDIO         |           |           | 7          | 1          |           | 8          |
| CAQUETA         |           |           |            | 3          |           | 3          |
| VICHADA         |           |           |            | 3          |           | 3          |
| AMAZONAS        |           |           |            | 2          |           | 2          |
| CHOCO           |           |           | 1          | 1          |           | 2          |
| NARIÑO          |           |           | 2          |            |           | 2          |
| VAUPES          |           |           |            | 2          |           | 2          |
| ARAUCA          |           |           | 1          |            |           | 1          |
| PUTUMAYO        |           |           |            | 1          |           | 1          |
| <b>Total</b>    | <b>11</b> | <b>27</b> | <b>128</b> | <b>403</b> | <b>31</b> | <b>600</b> |

**Número de proyectos vigentes por departamento**


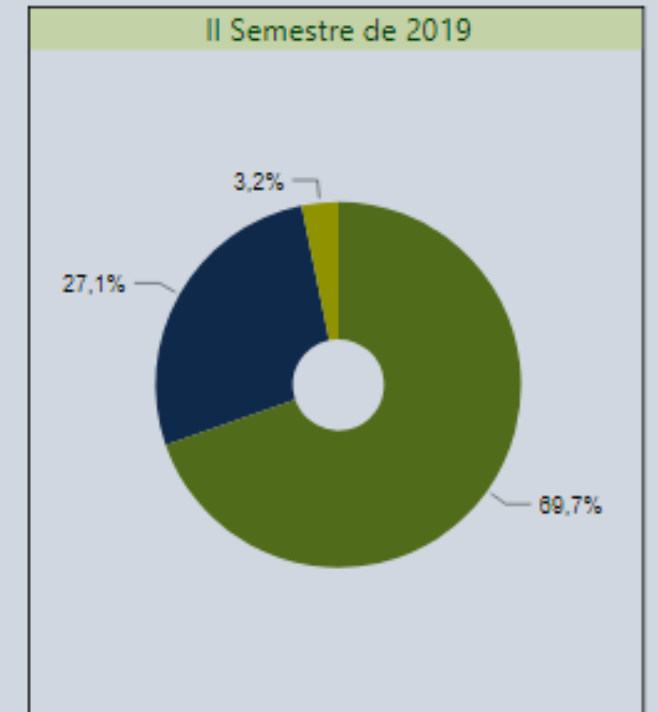
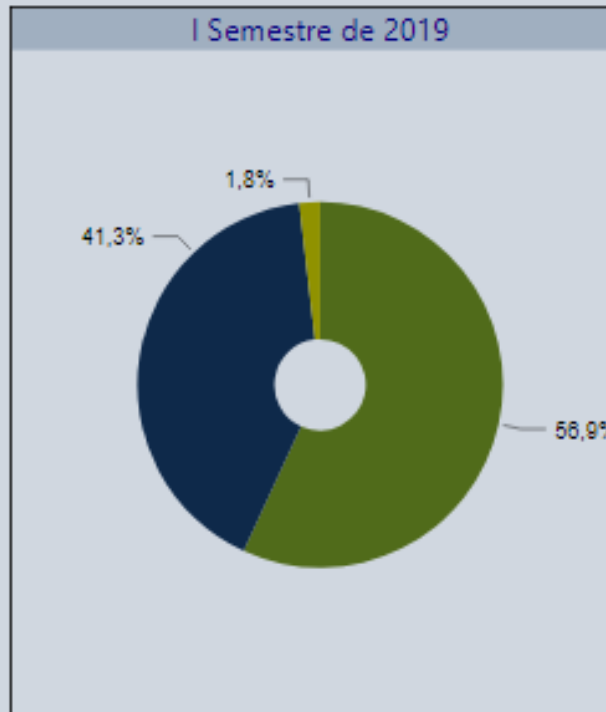
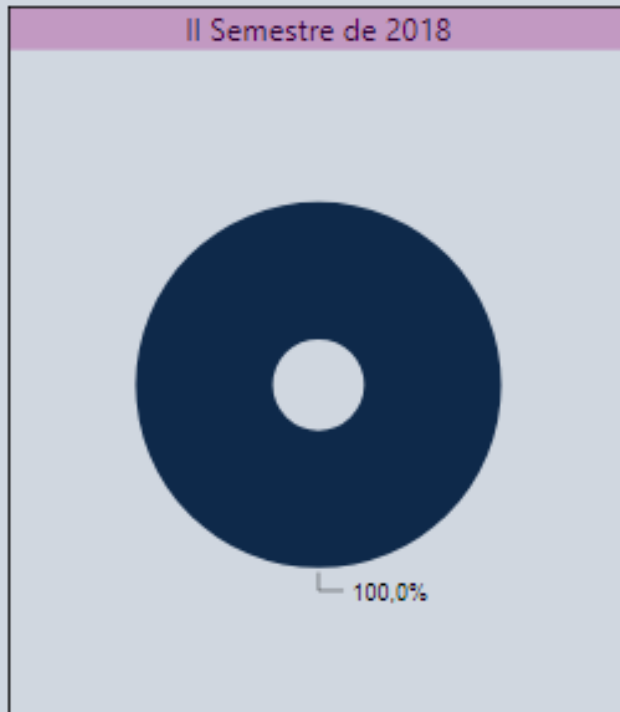
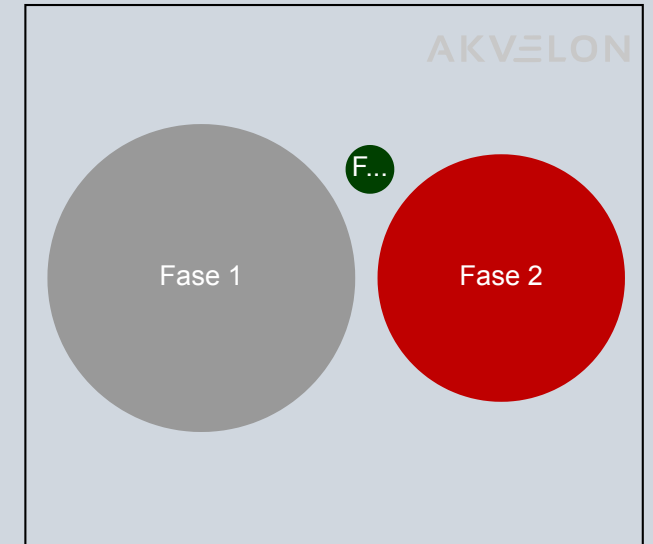
Proyectos vigentes por departamento



Número de proyectos vigentes según su estado

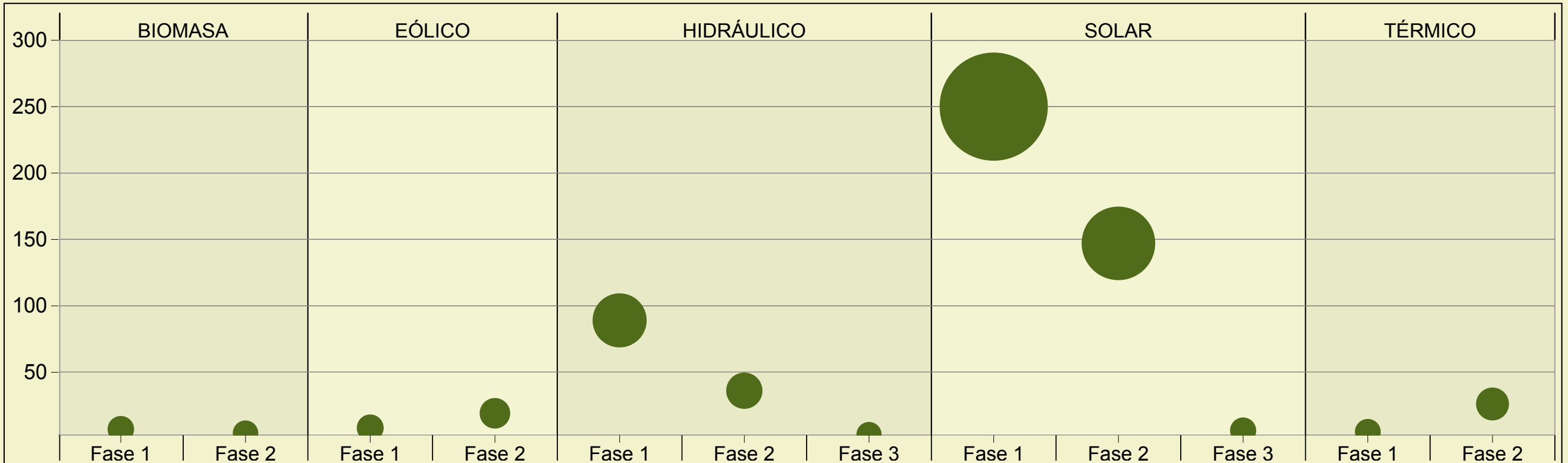


| Year         | Fase 1     | Fase 2     | Fase 3   | Total      |
|--------------|------------|------------|----------|------------|
| 2019         | 132        | 232        | 9        | 373        |
| 2018         | 227        |            |          | 227        |
| <b>Total</b> | <b>359</b> | <b>232</b> | <b>9</b> | <b>600</b> |



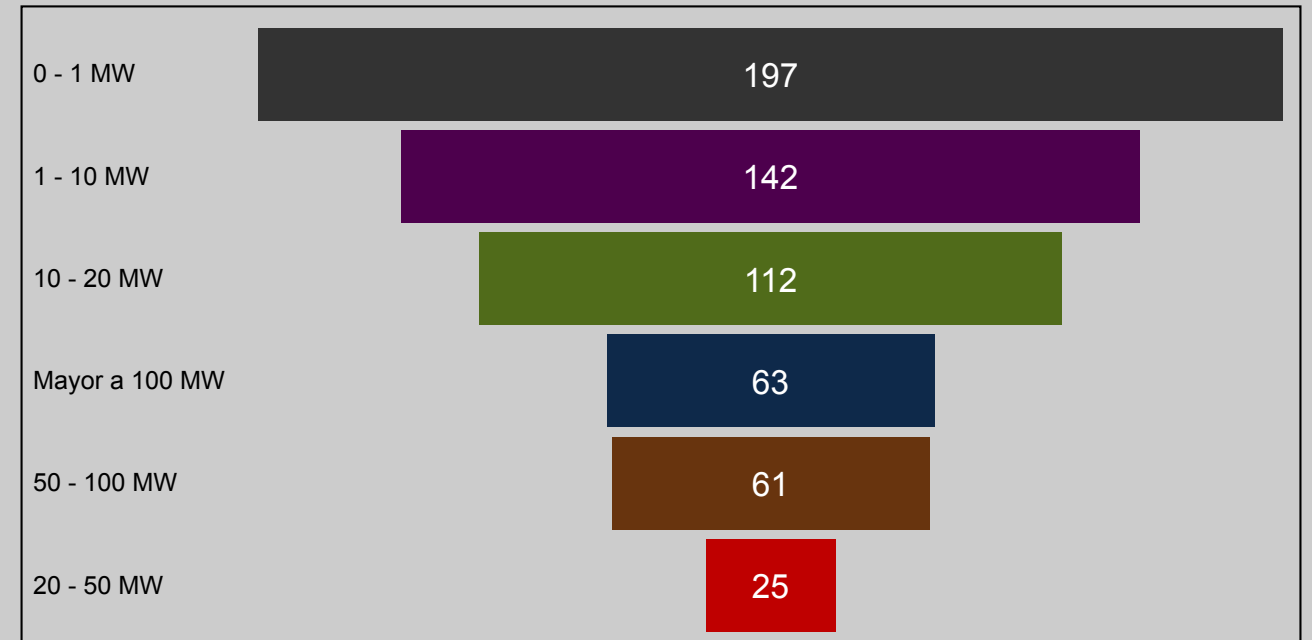
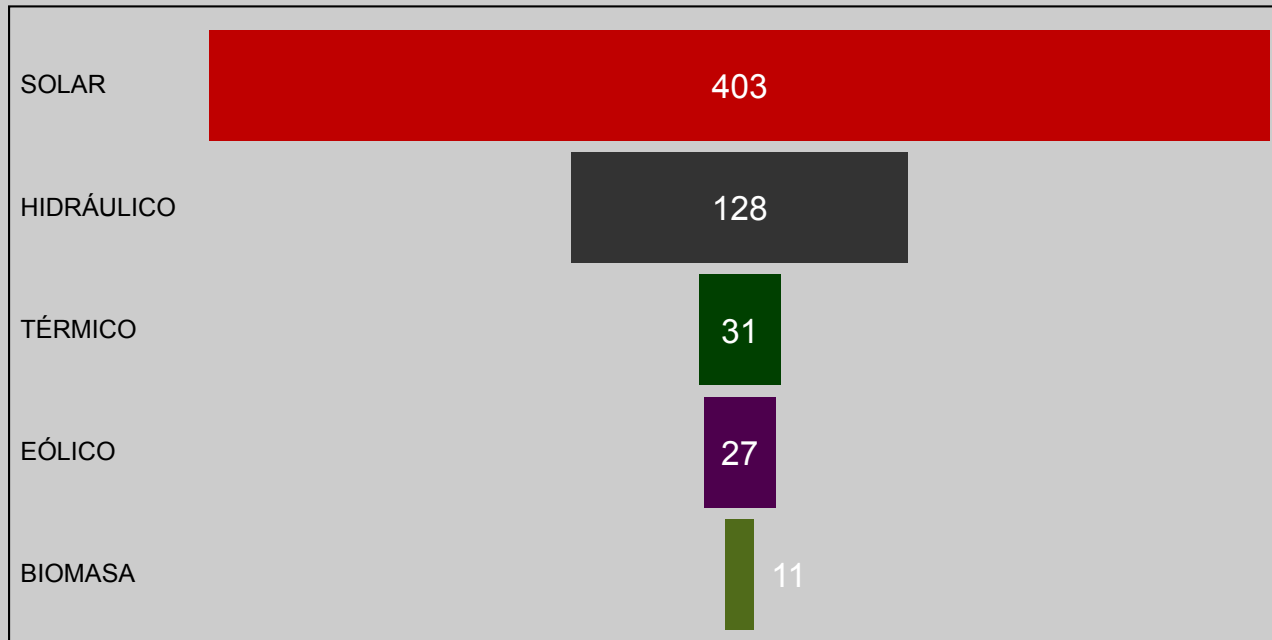
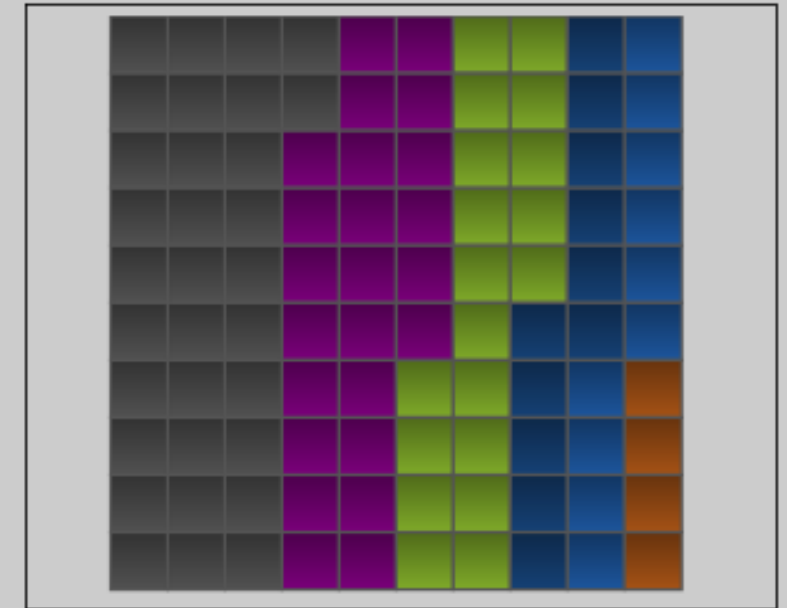
Número de proyectos vigentes según el tipo y el rango de potencia

| Estado       | BIOMASA   | EÓLICO    | HIDRÁULICO | SOLAR      | TÉRMICO   | Total      |
|--------------|-----------|-----------|------------|------------|-----------|------------|
| Fase 3       |           |           | 3          | 6          |           | 9          |
| Fase 2       | 4         | 19        | 36         | 147        | 26        | 232        |
| Fase 1       | 7         | 8         | 89         | 250        | 5         | 359        |
| <b>Total</b> | <b>11</b> | <b>27</b> | <b>128</b> | <b>403</b> | <b>31</b> | <b>600</b> |



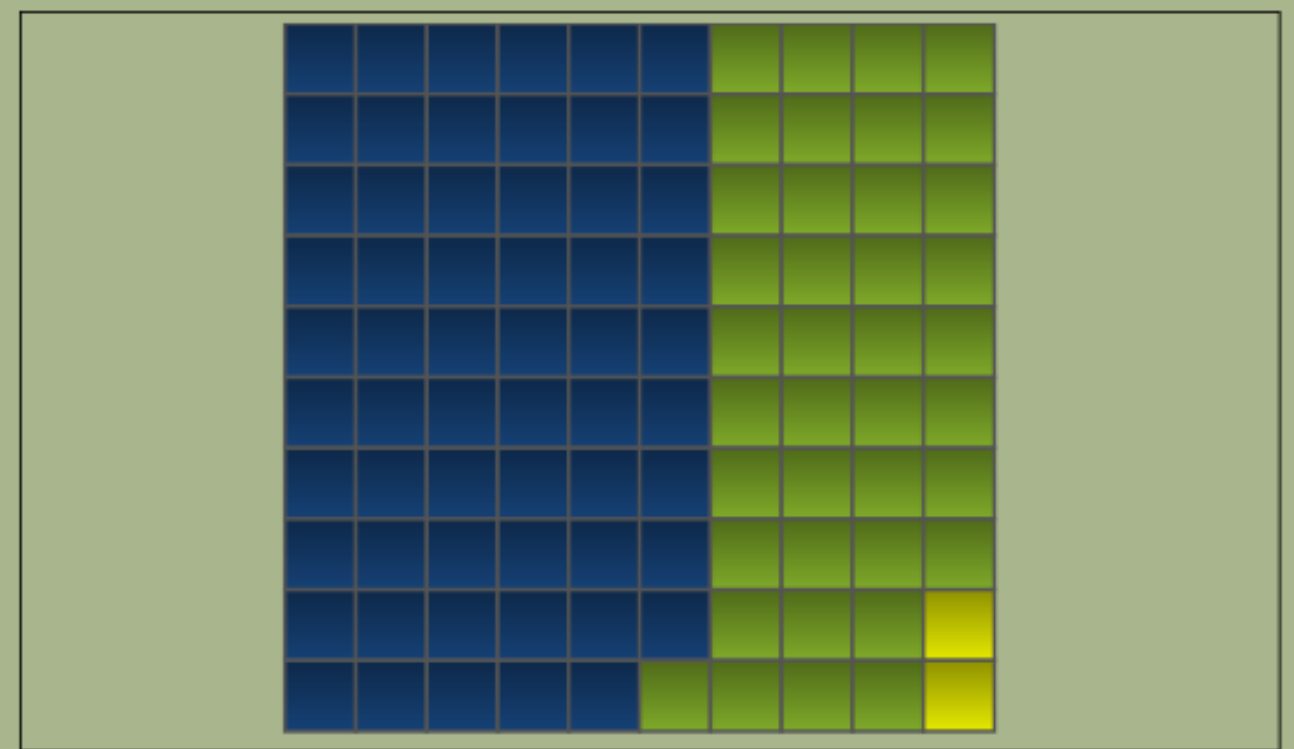
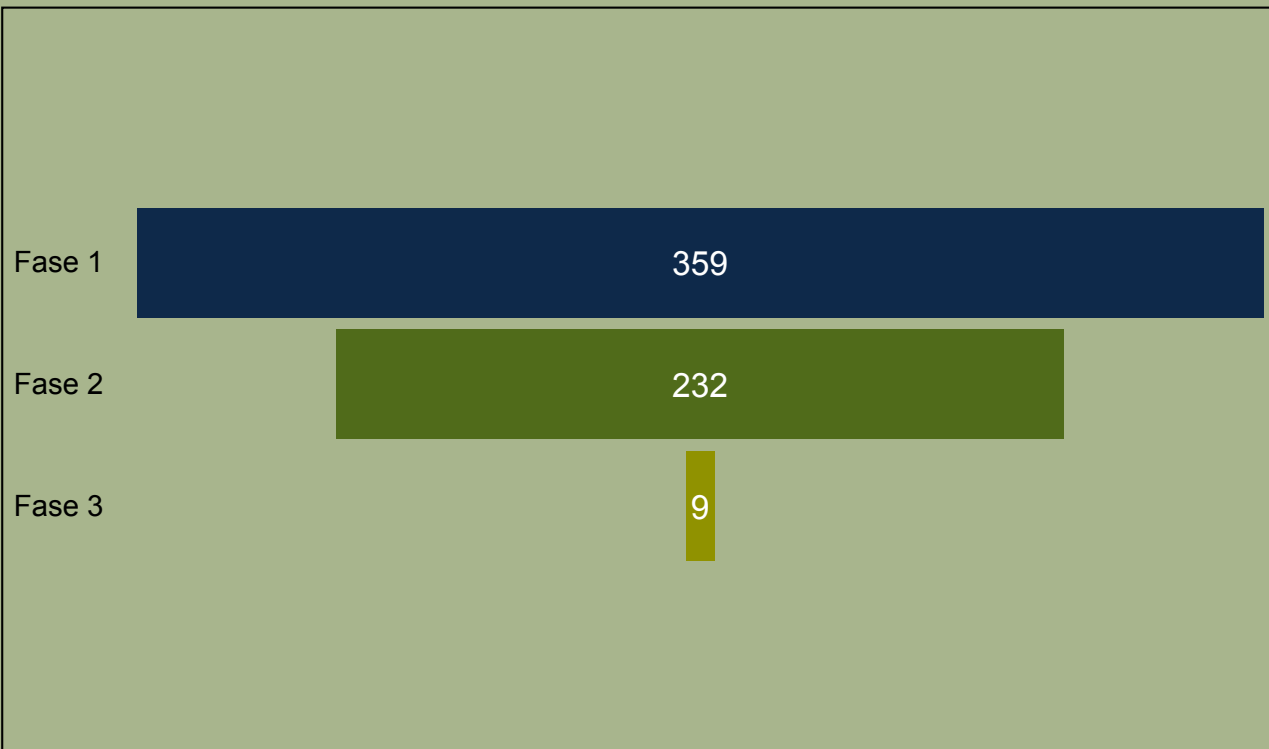
**Número de proyectos vigentes según el tipo y el rango de potencia**

| Rango          | BIOMASA   | EÓLICO    | HIDRÁULICO | SOLAR      | TÉRMICO   | Total      |
|----------------|-----------|-----------|------------|------------|-----------|------------|
| 0 - 1 MW       | 5         |           | 1          | 190        | 1         | <b>197</b> |
| 1 - 10 MW      | 5         | 3         | 69         | 65         |           | <b>142</b> |
| 10 - 20 MW     |           |           | 34         | 74         | 4         | <b>112</b> |
| Mayor a 100 MW |           | 11        | 7          | 33         | 12        | <b>63</b>  |
| 50 - 100 MW    |           | 12        | 9          | 30         | 10        | <b>61</b>  |
| 20 - 50 MW     | 1         | 1         | 8          | 11         | 4         | <b>25</b>  |
| <b>Total</b>   | <b>11</b> | <b>27</b> | <b>128</b> | <b>403</b> | <b>31</b> | <b>600</b> |

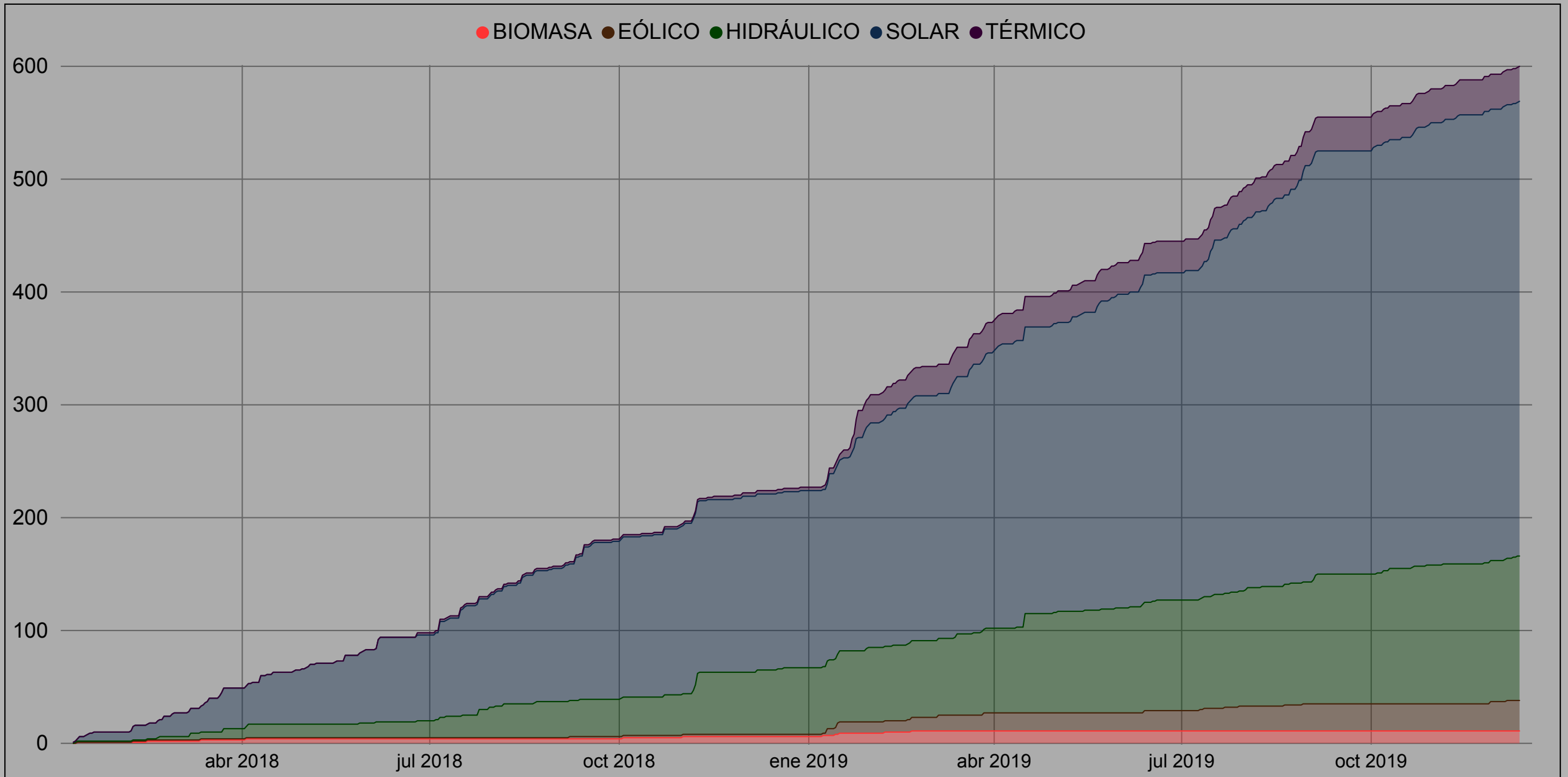


Número de proyectos vigentes según el tipo y el rango de potencia

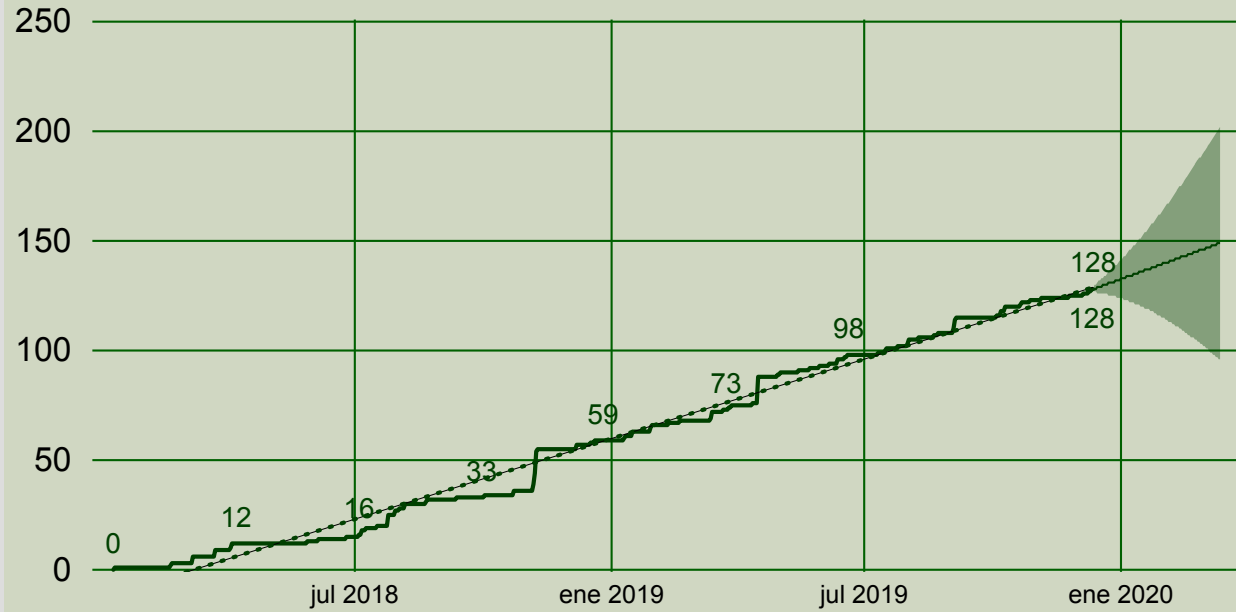
| Estado       | 0 - 1 MW   | 1 - 10 MW  | 10 - 20 MW | 20 - 50 MW | 50 - 100 MW | Mayor a 100 MW | Total      |
|--------------|------------|------------|------------|------------|-------------|----------------|------------|
| Fase 1       | 190        | 81         | 41         | 12         | 18          | 17             | <b>359</b> |
| Fase 2       | 7          | 54         | 69         | 13         | 43          | 46             | <b>232</b> |
| Fase 3       |            | 7          | 2          |            |             |                | <b>9</b>   |
| <b>Total</b> | <b>197</b> | <b>142</b> | <b>112</b> | <b>25</b>  | <b>61</b>   | <b>63</b>      | <b>600</b> |



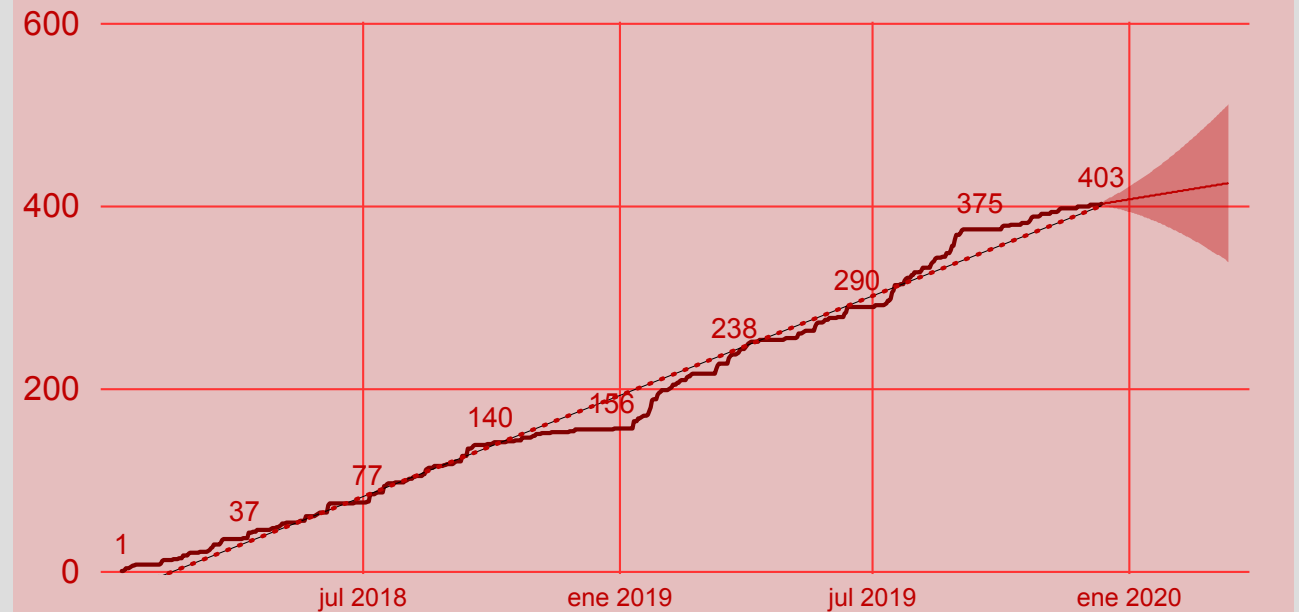
Número acumulado de proyectos vigentes según el tipo



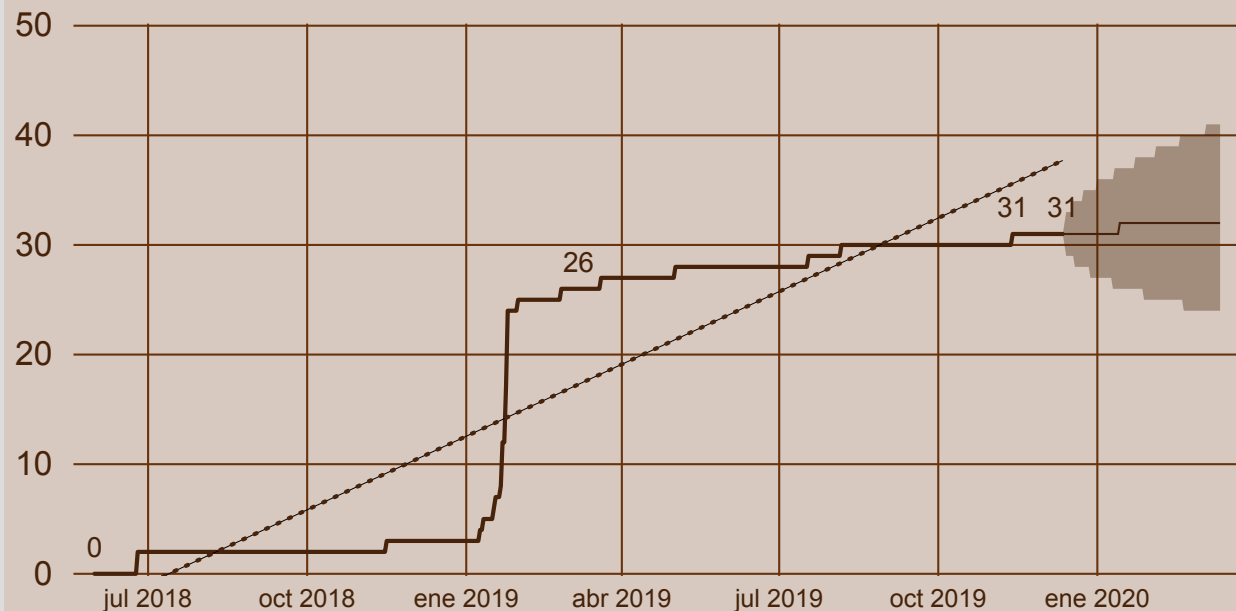
Proyección de número de proyectos hidráulicos



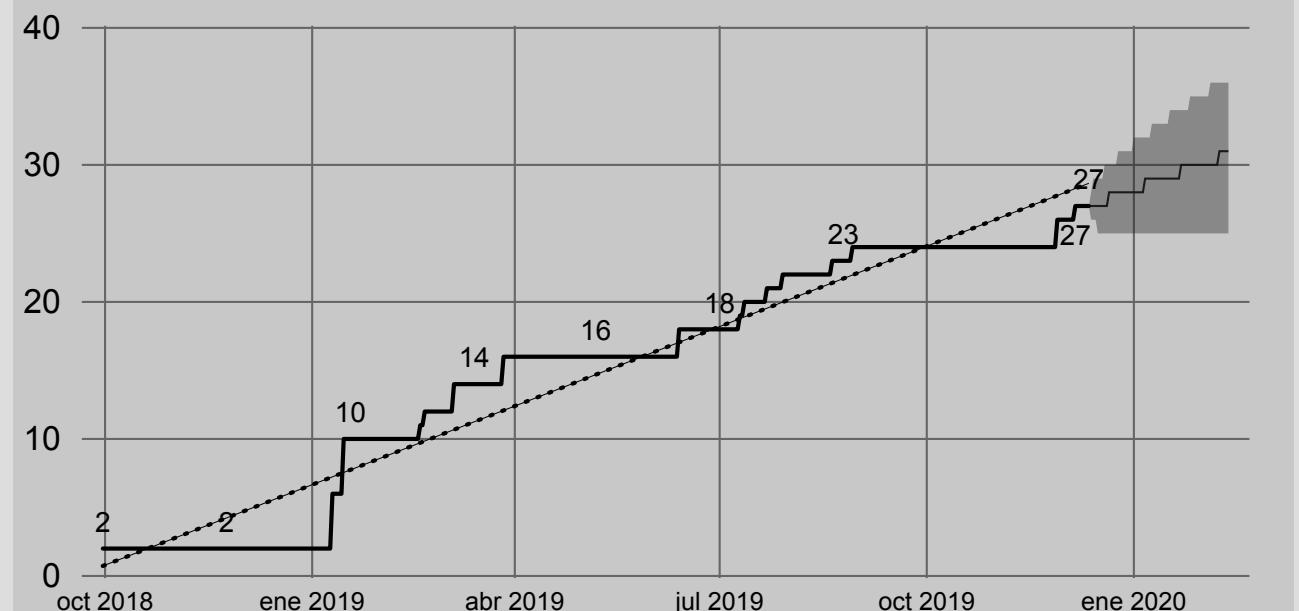
Proyección de número de proyectos solares



Proyección de número de proyectos térmicos

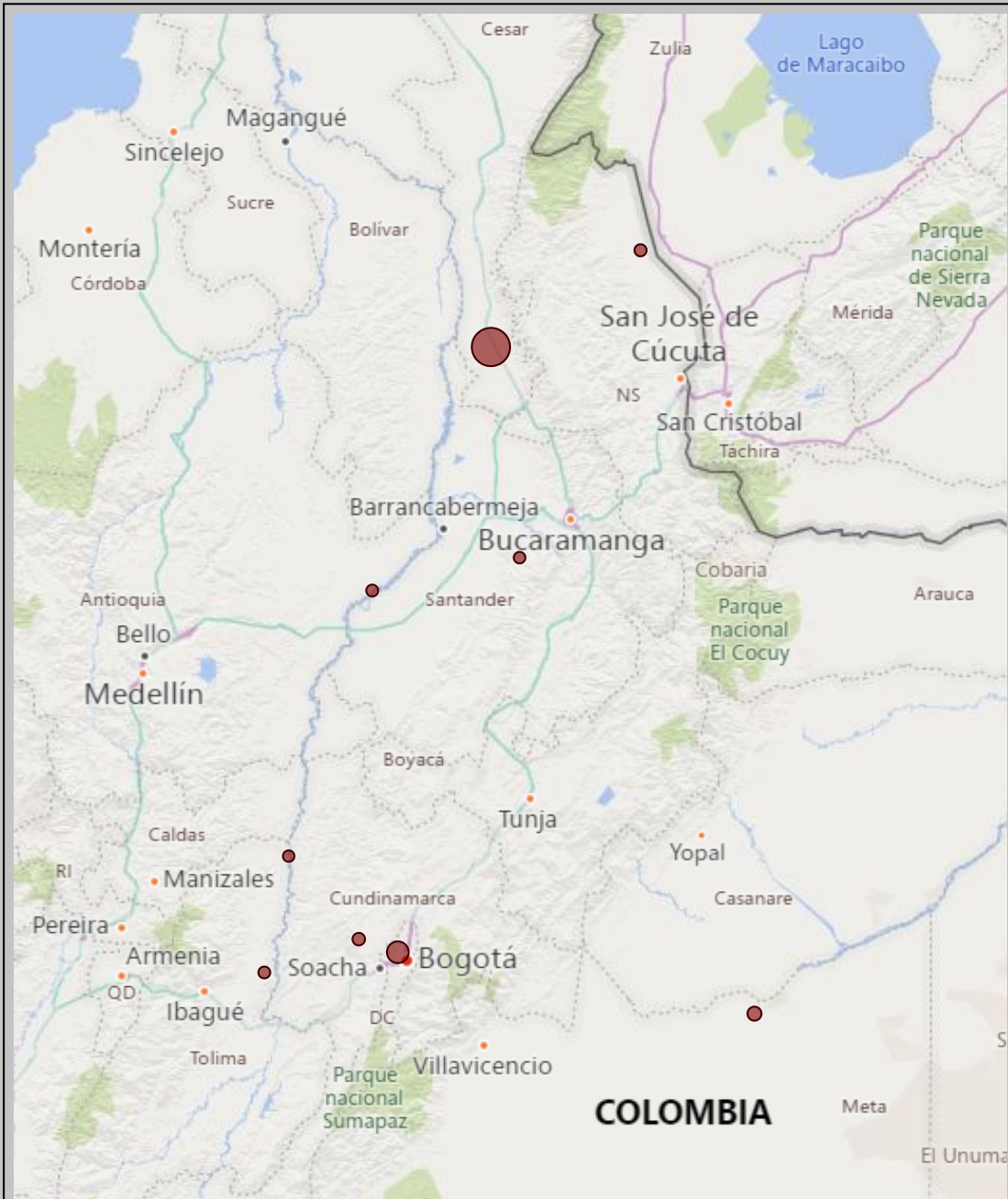


Proyección de número de proyectos eólicos

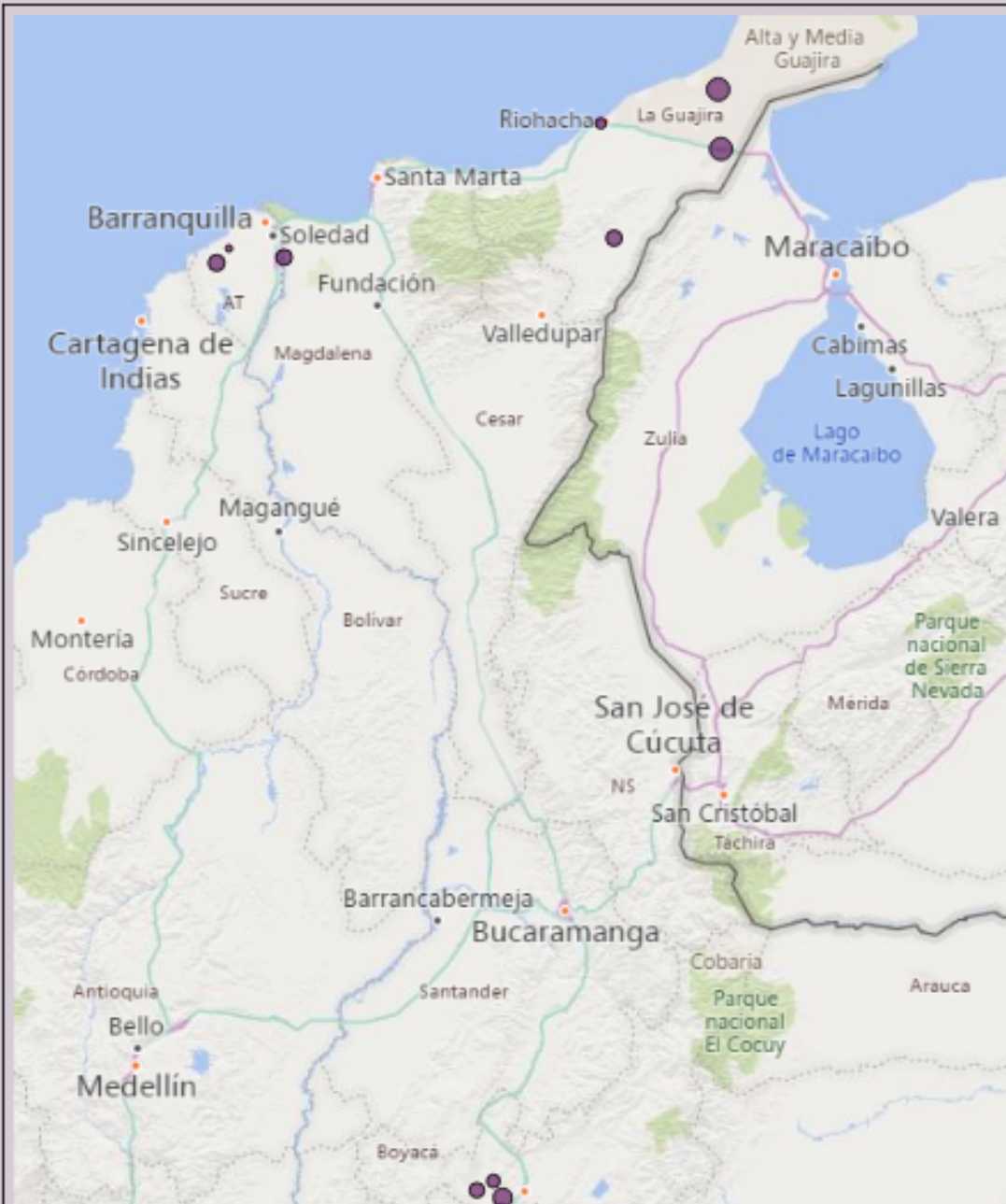



**Ubicación de los principales proyectos solares vigentes**

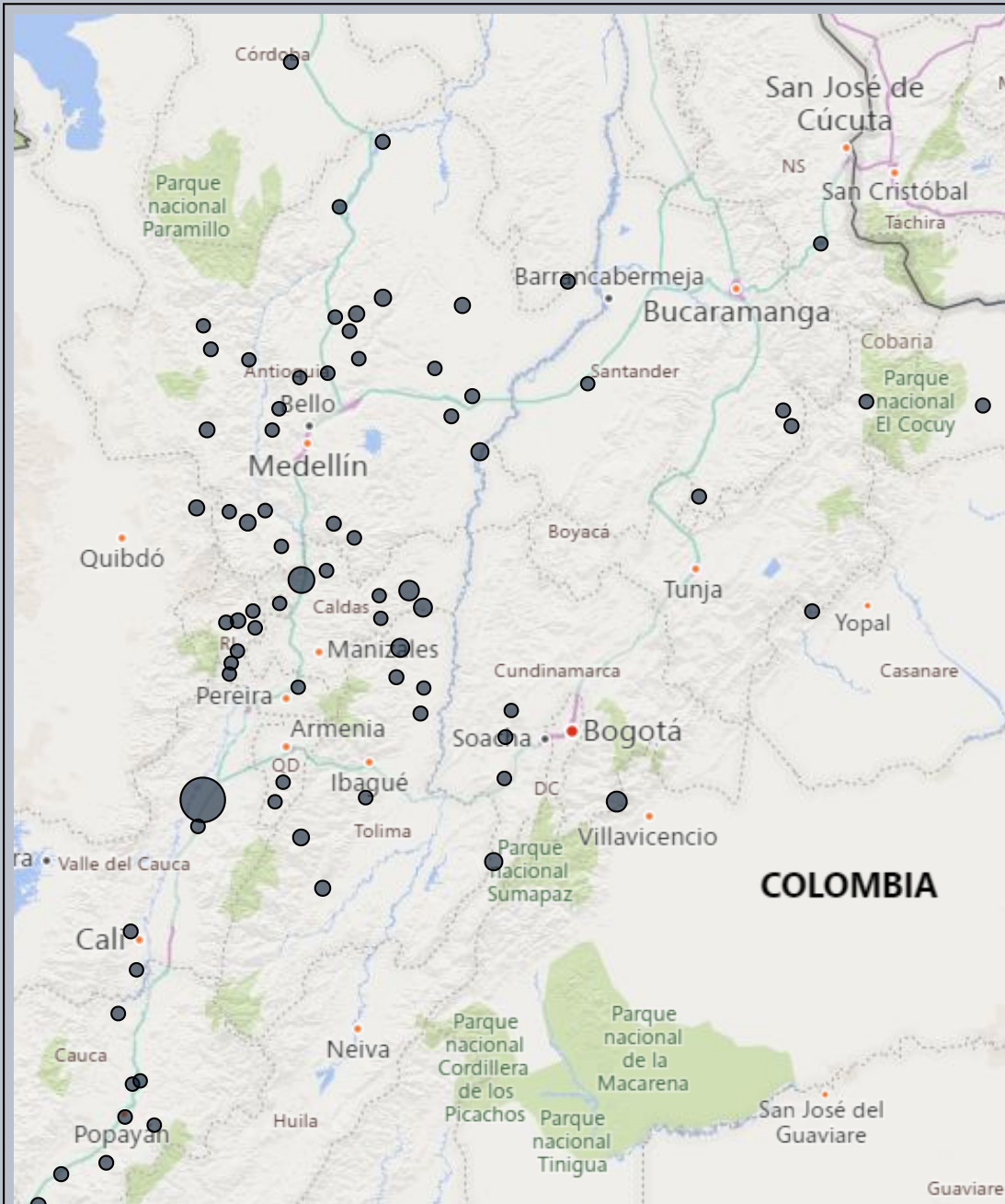
| Municipio-Departamento         | Capacidad MW    | Estado | Entrada Operacion |
|--------------------------------|-----------------|--------|-------------------|
| CIMITARRA, SANTANDER           | 719,9           | Fase 2 | 01/12/2021        |
| MAICAO, LA GUAJIRA             | 600,0           | Fase 1 | 01/10/2024        |
| GUADUAS, CUNDINAMARCA          | 300,0           | Fase 2 | 31/12/2021        |
| SAN JUAN DEL CESAR, LA GUAJIRA | 300,0           | Fase 2 | 31/12/2021        |
| BELTRAN, CUNDINAMARCA          | 250,0           | Fase 1 | 15/12/2019        |
| EL PASO, CESAR                 | 240,0           | Fase 2 | 01/01/2020        |
| MONTELIBANO, CORDOBA           | 219,9           | Fase 2 | 30/11/2021        |
| ALTAMIRA, HUILA                | 200,1           | Fase 2 | 30/12/2021        |
| OCAÑA, NORTE DE SANTANDER      | 200,0           | Fase 2 | 31/12/2022        |
| PUERTO BOYACA, BOYACA          | 200,0           | Fase 2 | 25/07/2020        |
| PUERTO NARE, ANTIOQUIA         | 200,0           | Fase 2 | 01/12/2021        |
| RIOHACHA, LA GUAJIRA           | 200,0           | Fase 2 | 30/12/2021        |
| SANTA ROSA, BOLIVAR            | 200,0           | Fase 2 | 31/12/2022        |
| SOACHA, CUNDINAMARCA           | 200,0           | Fase 1 | 01/09/2020        |
| SAN JUAN DEL CESAR, LA GUAJIRA | 199,8           | Fase 2 | 01/01/2022        |
| SAN JUAN DEL CESAR, LA GUAJIRA | 198,0           | Fase 2 | 01/06/2022        |
| EL MOLINO, LA GUAJIRA          | 181,3           | Fase 2 | 16/11/2020        |
| CIMITARRA, SANTANDER           | 180,0           | Fase 2 | 21/06/2021        |
| BARRANCABERMEJA, SANTANDER     | 170,0           | Fase 2 | 30/12/2021        |
| EL MOLINO, LA GUAJIRA          | 168,0           | Fase 2 | 23/03/2023        |
| IBAGUE, TOLIMA                 | 160,0           | Fase 2 | 15/01/2022        |
| EL PASO, CESAR                 | 150,0           | Fase 2 | 05/06/2022        |
| PUERTO GAITAN, META            | 150,0           | Fase 1 | 13/07/2021        |
| TOLUVIEJO, SUCRE               | 150,0           | Fase 2 | 30/06/2022        |
| MONTELIBANO, CORDOBA           | 139,3           | Fase 2 | 01/01/2022        |
| BARRANCABERMEJA, SANTANDER     | 120,0           | Fase 2 | 01/03/2021        |
| LA DORADA, CALDAS              | 102,0           | Fase 2 | 31/12/2019        |
| <b>Total</b>                   | <b>11.162,2</b> |        |                   |


**Ubicación de los principales proyectos de biomasa vigentes**

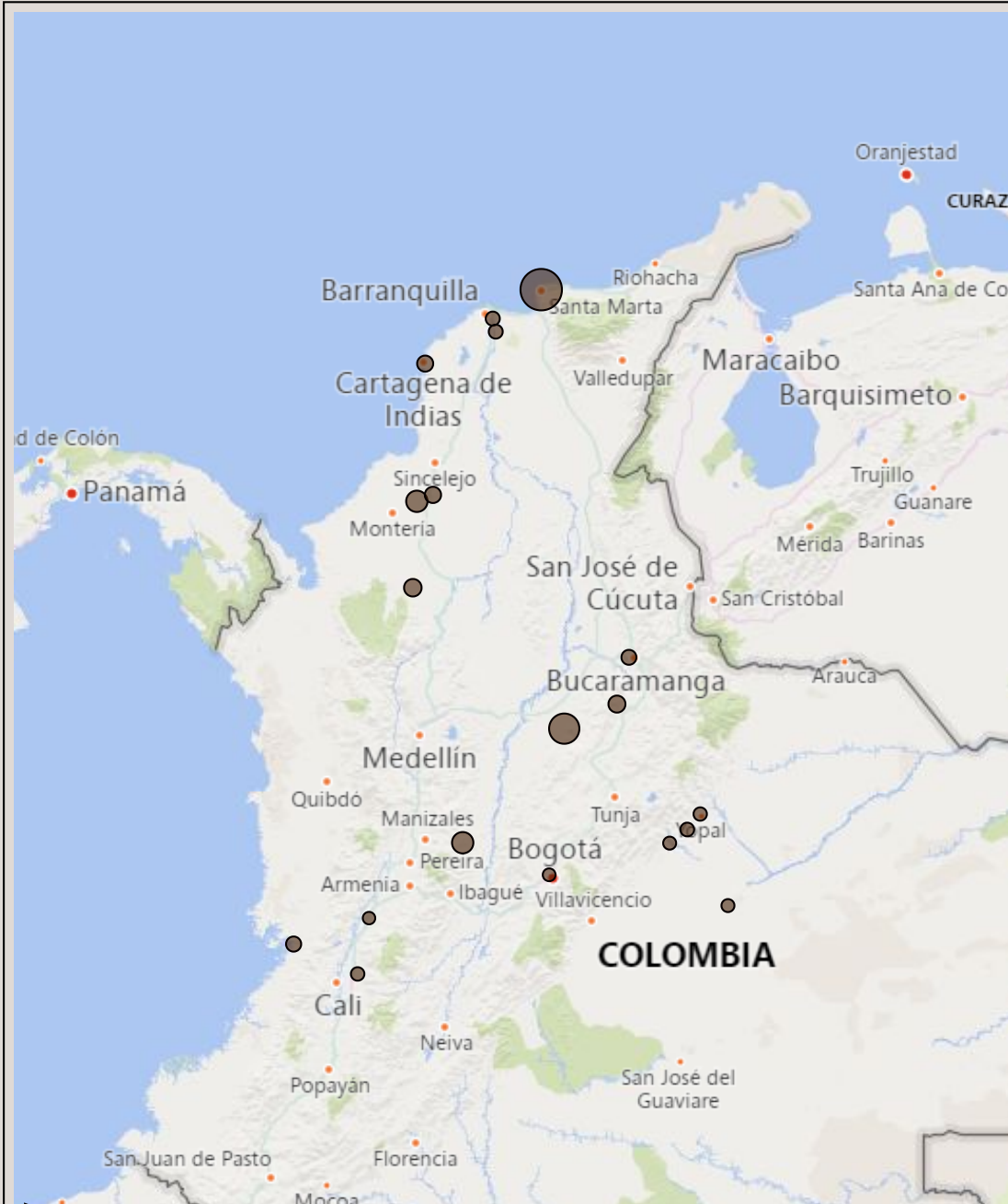
| Municipio-Departamento               | Capacidad MW | Estado | Entrada Operacion |
|--------------------------------------|--------------|--------|-------------------|
| VILLANUEVA, CASANARE                 | 25,0         | Fase 2 | 30/05/2021        |
| BOGOTA, D.C., SANTAFE DE BOGOTA D.C. | 9,9          | Fase 2 | 01/09/2019        |
| BOGOTA, D.C., SANTAFE DE BOGOTA D.C. | 9,9          | Fase 2 | 01/05/2020        |
| BOGOTA, D.C., SANTAFE DE BOGOTA D.C. | 9,0          | Fase 2 | 01/06/2021        |
| PUERTO GAITAN, META                  | 2,4          | Fase 1 | 01/07/2017        |
| BOJACA, CUNDINAMARCA                 | 1,0          | Fase 1 | 01/08/2018        |
| TIBU, NORTE DE SANTANDER             | 0,6          | Fase 1 | 12/08/2019        |
| RIONEGRO, SANTANDER                  | 0,4          | Fase 1 | 13/10/2019        |
| PIEDRAS, TOLIMA                      | 0,3          | Fase 1 | 31/05/2019        |
| SAN VICENTE DE CHUCURI, SANTANDER    | 0,1          | Fase 1 | 01/01/2018        |
| HONDA, TOLIMA                        | 0,0          | Fase 1 | 01/10/2019        |
| <b>Total</b>                         | <b>58,7</b>  |        |                   |


**Ubicación de los principales proyectos eólicos vigentes**

| Municipio-Departamento  | Capacidad MW   | Estado | Entrada Operacion |
|-------------------------|----------------|--------|-------------------|
| URIBIA, LA GUAJIRA      | 750,0          | Fase 2 | 28/02/2023        |
| URIBIA, LA GUAJIRA      | 378,0          | Fase 1 | 01/12/2023        |
| URIBIA, LA GUAJIRA      | 362,3          | Fase 1 | 01/04/2021        |
| MAICAO, LA GUAJIRA      | 325,0          | Fase 1 | 31/12/2022        |
| MAICAO, LA GUAJIRA      | 212,0          | Fase 2 | 01/06/2022        |
| PIOJO, ATLANTICO        | 200,0          | Fase 2 | 01/01/2022        |
| SITIONUEVO, MAGDALENA   | 199,8          | Fase 2 | 01/10/2020        |
| URIBIA, LA GUAJIRA      | 198,0          | Fase 2 | 31/12/2020        |
| URIBIA, LA GUAJIRA      | 150,0          | Fase 2 | 31/12/2024        |
| MAICAO, LA GUAJIRA      | 132,0          | Fase 2 | 31/12/2020        |
| SAMACA, BOYACA          | 125,0          | Fase 1 | 01/08/2021        |
| FONSECA, LA GUAJIRA     | 100,0          | Fase 2 | 31/07/2022        |
| RAQUIRA, BOYACA         | 92,0           | Fase 1 | 01/06/2024        |
| SACHICA, BOYACA         | 73,0           | Fase 1 | 01/06/2024        |
| SANTA CATALINA, BOLIVAR | 60,0           | Fase 1 | 01/12/2021        |
| <b>Total</b>            | <b>3.456,8</b> |        |                   |

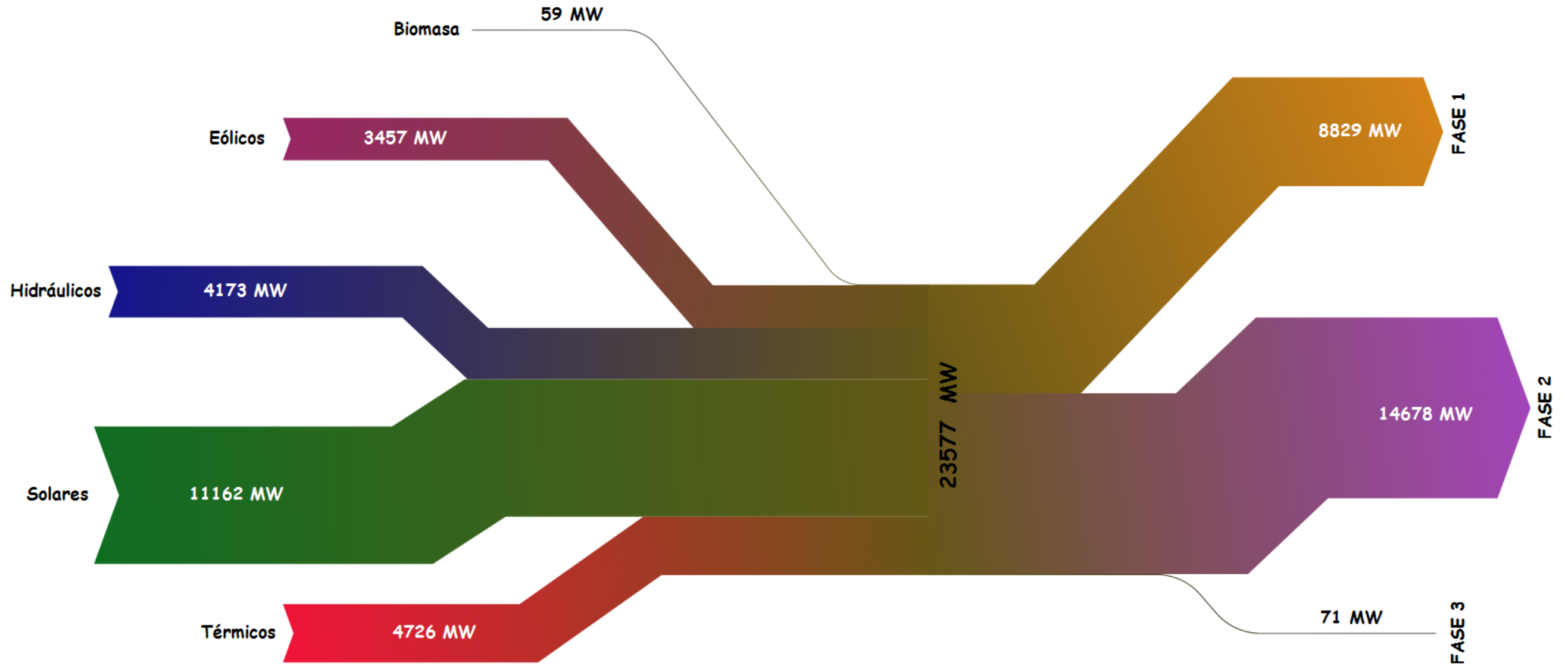

**Ubicación de los principales proyectos hidráulicos vigentes**

| Municipio-Departamento     | Capacidad MW   | Estado | Entrada Operacion |
|----------------------------|----------------|--------|-------------------|
| ARGELIA, CAUCA             | 800,0          | Fase 1 | 20/08/2026        |
| SAMANA, CALDAS             | 460,0          | Fase 1 | 01/07/2028        |
| MARMATO, CALDAS            | 320,0          | Fase 1 | 01/01/2029        |
| SAN LUIS, ANTIOQUIA        | 240,0          | Fase 1 | 01/01/2028        |
| GUAYABETAL, CUNDINAMARCA   | 168,8          | Fase 1 | 01/06/2019        |
| EL TAMBO, CAUCA            | 160,8          | Fase 1 | 10/08/2023        |
| VICTORIA, CALDAS           | 120,0          | Fase 2 | 01/12/2022        |
| PAEZ, BOYACA               | 101,0          | Fase 1 | 01/01/2024        |
| EL TAMBO, CAUCA            | 99,9           | Fase 2 | 01/12/2022        |
| PUERTO NARE, ANTIOQUIA     | 98,0           | Fase 2 | 01/12/2023        |
| URRAO, ANTIOQUIA           | 82,5           | Fase 1 | 01/01/2024        |
| ANORI, ANTIOQUIA           | 76,8           | Fase 1 | 01/01/2025        |
| LA UNION, NARIÑO           | 70,9           | Fase 1 | 10/06/2024        |
| RONCESVALLES, TOLIMA       | 66,0           | Fase 2 | 01/06/2023        |
| HISPANIA, ANTIOQUIA        | 65,0           | Fase 1 | 01/10/2024        |
| CAMPAMENTO, ANTIOQUIA      | 52,0           | Fase 1 | 28/02/2024        |
| REMEDIOS, ANTIOQUIA        | 50,0           | Fase 2 | 01/01/2024        |
| EL CARMEN DE ATRATO, CHOCO | 48,3           | Fase 1 | 30/06/2024        |
| CHAPARRAL, TOLIMA          | 45,0           | Fase 2 | 01/03/2022        |
| PUEBLO RICO, RISARALDA     | 43,7           | Fase 1 | 01/12/2023        |
| PUEBLO RICO, RISARALDA     | 39,8           | Fase 2 | 15/01/2023        |
| URRAO, ANTIOQUIA           | 38,0           | Fase 1 | 23/07/2024        |
| PAJARITO, BOYACA           | 33,8           | Fase 1 | 01/06/2022        |
| ROVIRA, TOLIMA             | 30,0           | Fase 1 | 16/12/2024        |
| FRONTINO, ANTIOQUIA        | 29,8           | Fase 2 | 01/12/2021        |
| TAMESIS, ANTIOQUIA         | 21,3           | Fase 2 | 01/12/2020        |
| PAJARITO, BOYACA           | 20,3           | Fase 1 | 01/06/2023        |
| <b>Total</b>               | <b>4.172,9</b> |        |                   |

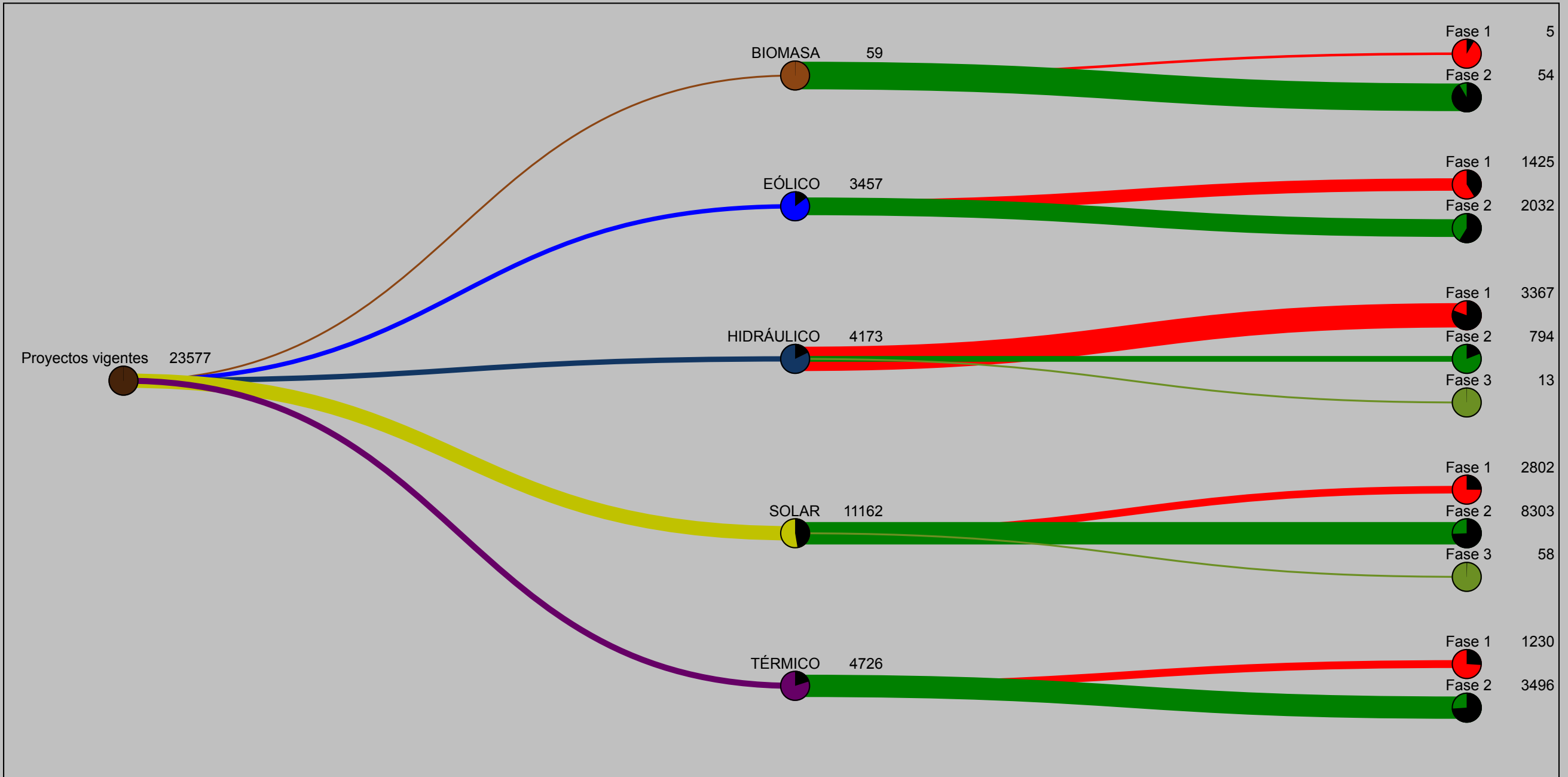

**Ubicación de los principales proyectos térmicos vigentes**

| Municipio-Departamento             | Capacidad MW   | Estado | Entrada Operacion |
|------------------------------------|----------------|--------|-------------------|
| SANTA MARTA, MAGDALENA             | 1.140,0        | Fase 1 | 01/02/2024        |
| CIMITARRA, SANTANDER               | 700,0          | Fase 2 | 01/12/2022        |
| CIENAGA DE ORO, CORDOBA            | 350,0          | Fase 2 | 01/12/2022        |
| VENECIA, ANTIOQUIA                 | 350,0          | Fase 2 | 01/11/2022        |
| CARTAGENA, BOLIVAR                 | 252,0          | Fase 2 | 30/11/2020        |
| CARTAGENA, BOLIVAR                 | 214,0          | Fase 2 | 01/06/2021        |
| PUERTO LIBERTADOR, CORDOBA         | 200,0          | Fase 2 | 30/04/2022        |
| SAN CAYETANO, NORTE DE SANTANDER   | 180,0          | Fase 2 | 12/12/2025        |
| BUENAVENTURA, VALLE DEL CAUCA      | 150,0          | Fase 2 | 01/11/2023        |
| SAHAGUN, CORDOBA                   | 150,0          | Fase 2 | 01/04/2020        |
| SOLEDAD, ATLANTICO                 | 104,0          | Fase 2 | 20/11/2022        |
| CARTAGENA, BOLIVAR                 | 100,0          | Fase 2 | 30/11/2022        |
| YOPAL, CASANARE                    | 100,0          | Fase 2 | 01/12/2019        |
| LEBRIJA, SANTANDER                 | 99,0           | Fase 2 | 01/03/2023        |
| CARTAGENA, BOLIVAR                 | 98,0           | Fase 2 | 01/12/2022        |
| BUENAVENTURA, VALLE DEL CAUCA      | 85,3           | Fase 2 | 01/12/2022        |
| BUENAVENTURA, VALLE DEL CAUCA      | 80,0           | Fase 2 | 01/06/2021        |
| SITIONUEVO, MAGDALENA              | 60,0           | Fase 1 | 01/07/2021        |
| AGUAZUL, CASANARE                  | 50,0           | Fase 2 | 01/08/2021        |
| CARTAGENA, BOLIVAR                 | 50,0           | Fase 2 | 01/03/2017        |
| YOPAL, CASANARE                    | 50,0           | Fase 2 | 01/11/2019        |
| PALMIRA, VALLE DEL CAUCA           | 40,0           | Fase 2 | 01/07/2019        |
| YOPAL, CASANARE                    | 29,9           | Fase 1 | 01/12/2018        |
| SOLEDAD, ATLANTICO                 | 24,0           | Fase 2 | 01/12/2019        |
| PUERTO GAITAN, META                | 21,9           | Fase 2 | 01/12/2019        |
| TAURAMENA, CASANARE                | 21,9           | Fase 2 | 01/12/2019        |
| BOGOTÁ D.C. SANTAFE DE BOGOTÁ D.C. | 14,0           | Fase 2 | 01/08/2020        |
| <b>Total</b>                       | <b>4.726,4</b> |        |                   |

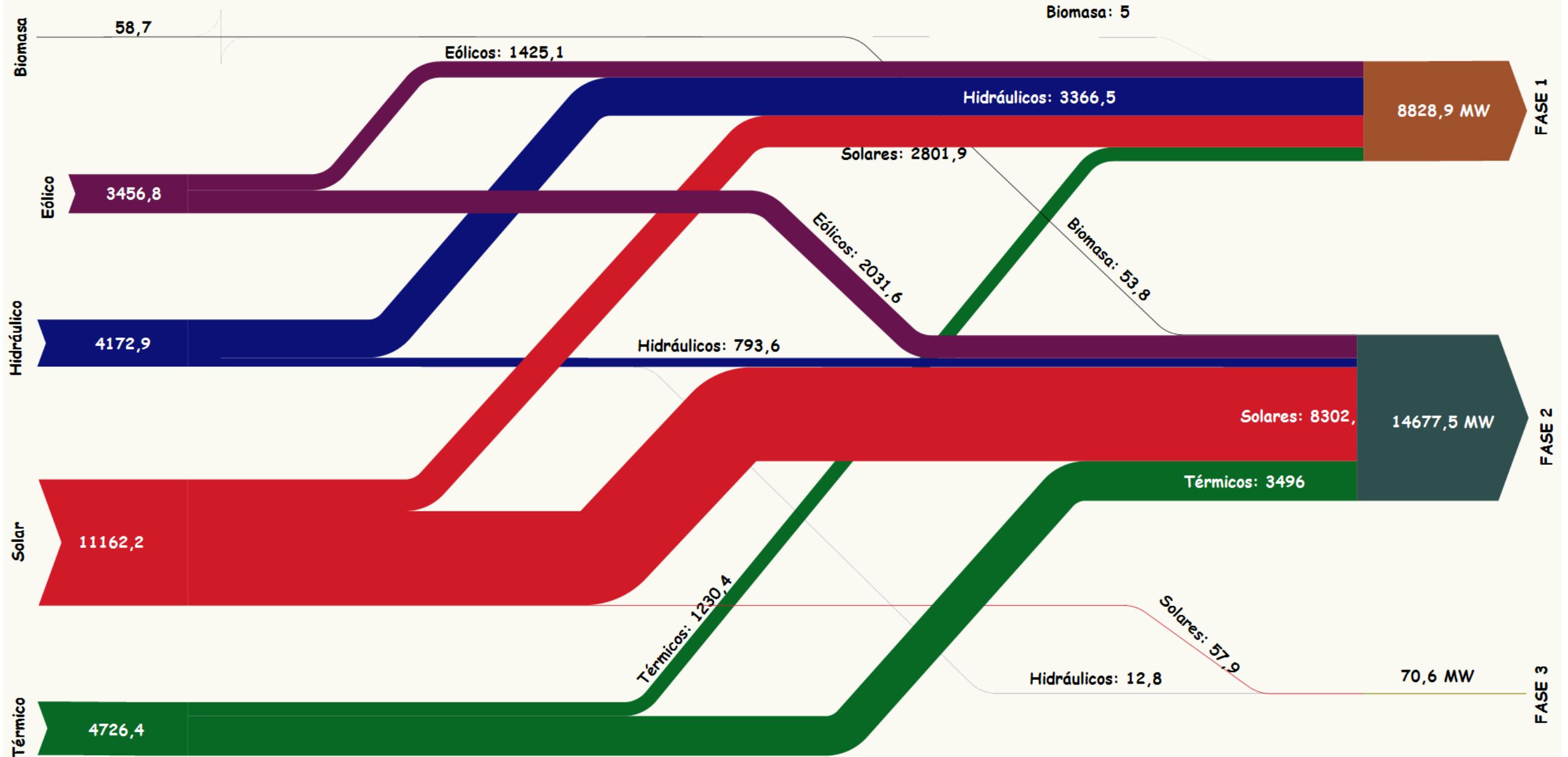
### Potencia acumulada de proyectos vigentes (MW)



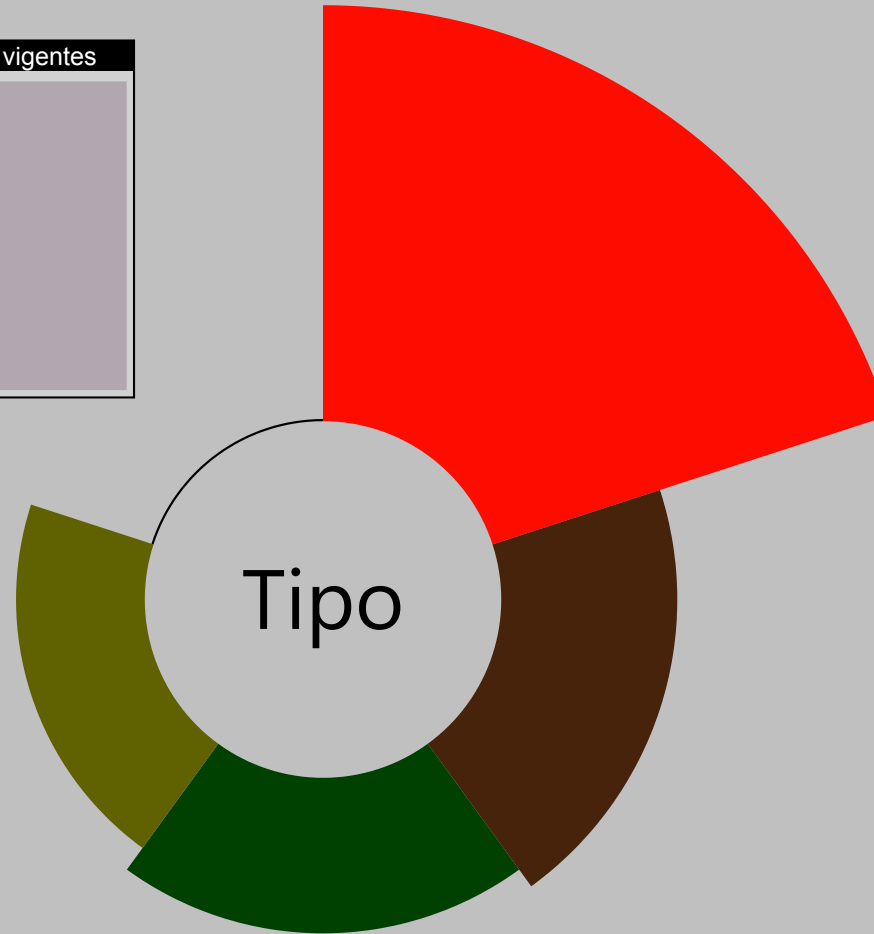
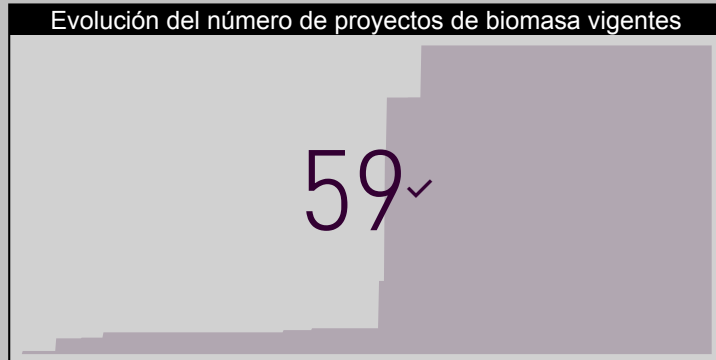
Capacidad de proyectos vigentes MW



Potencia acumulada de proyectos vigentes (MW)

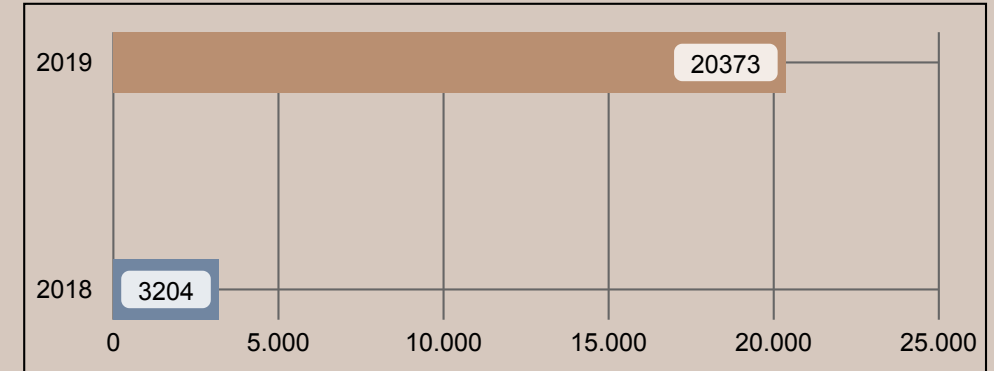


Potencia de proyectos vigentes por tipo MW 2017 - 2019

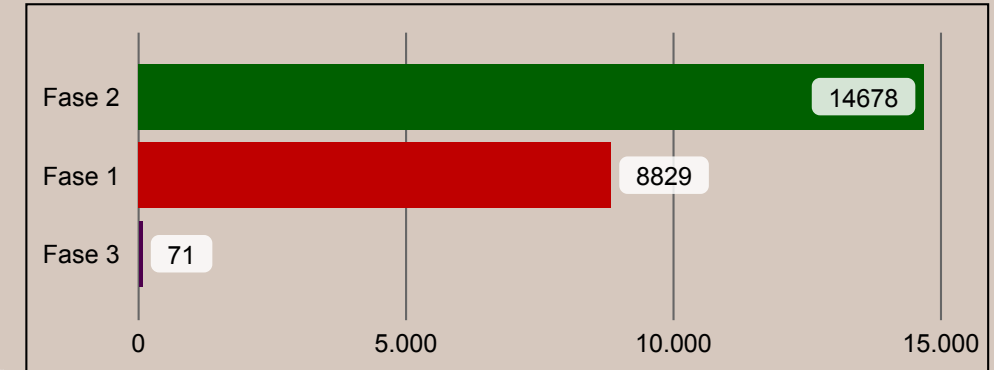


**Capacidad de los proyectos vigentes**

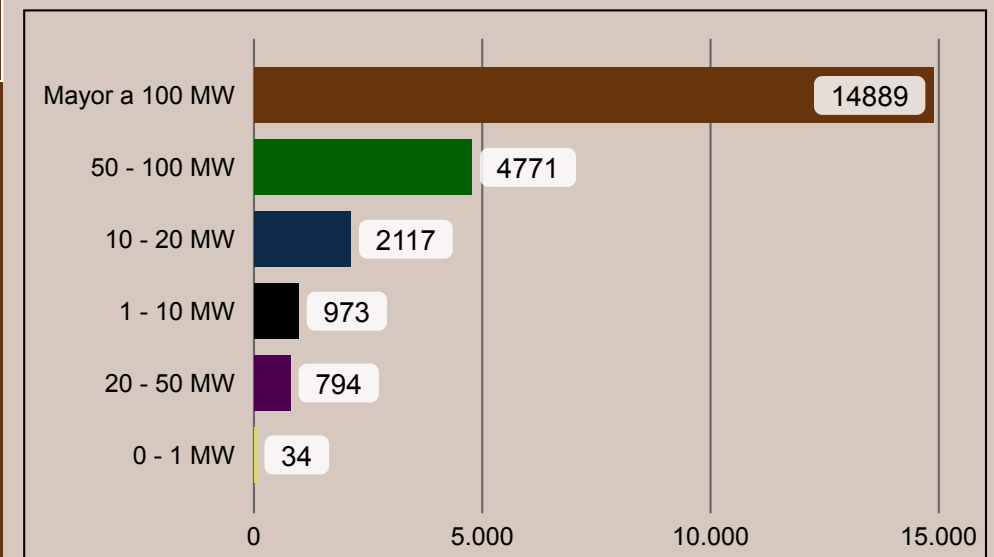
| Year         | BIOMASA   | EÓLICO       | HIDRÁULICO   | SOLAR         | TÉRMICO      | Total         |
|--------------|-----------|--------------|--------------|---------------|--------------|---------------|
| 2018         | 5         | 487          | 1.759        | 863           | 90           | <b>3.204</b>  |
| 2019         | 54        | 2.970        | 2.414        | 10.299        | 4.637        | <b>20.373</b> |
| <b>Total</b> | <b>59</b> | <b>3.457</b> | <b>4.173</b> | <b>11.162</b> | <b>4.726</b> | <b>23.577</b> |



| Estado       | BIOMASA   | EÓLICO       | HIDRÁULICO   | SOLAR         | TÉRMICO      | Total         |
|--------------|-----------|--------------|--------------|---------------|--------------|---------------|
| Fase 1       | 5         | 1.425        | 3.367        | 2.802         | 1.230        | <b>8.829</b>  |
| Fase 2       | 54        | 2.032        | 794          | 8.303         | 3.496        | <b>14.678</b> |
| Fase 3       |           |              | 13           | 58            |              | <b>71</b>     |
| <b>Total</b> | <b>59</b> | <b>3.457</b> | <b>4.173</b> | <b>11.162</b> | <b>4.726</b> | <b>23.577</b> |



| Rango          | BIOMASA   | EÓLICO       | HIDRÁULICO   | SOLAR         | TÉRMICO      | Total         |
|----------------|-----------|--------------|--------------|---------------|--------------|---------------|
| 0 - 1 MW       | 2         |              | 1            | 31            | 1            | <b>34</b>     |
| 1 - 10 MW      | 32        | 30           | 383          | 528           |              | <b>973</b>    |
| 10 - 20 MW     |           |              | 597          | 1.464         | 56           | <b>2.117</b>  |
| 20 - 50 MW     | 25        | 20           | 300          | 341           | 108          | <b>794</b>    |
| 50 - 100 MW    |           | 979          | 682          | 2.438         | 672          | <b>4.771</b>  |
| Mayor a 100 MW |           | 2.428        | 2.210        | 6.361         | 3.890        | <b>14.889</b> |
| <b>Total</b>   | <b>59</b> | <b>3.457</b> | <b>4.173</b> | <b>11.162</b> | <b>4.726</b> | <b>23.577</b> |

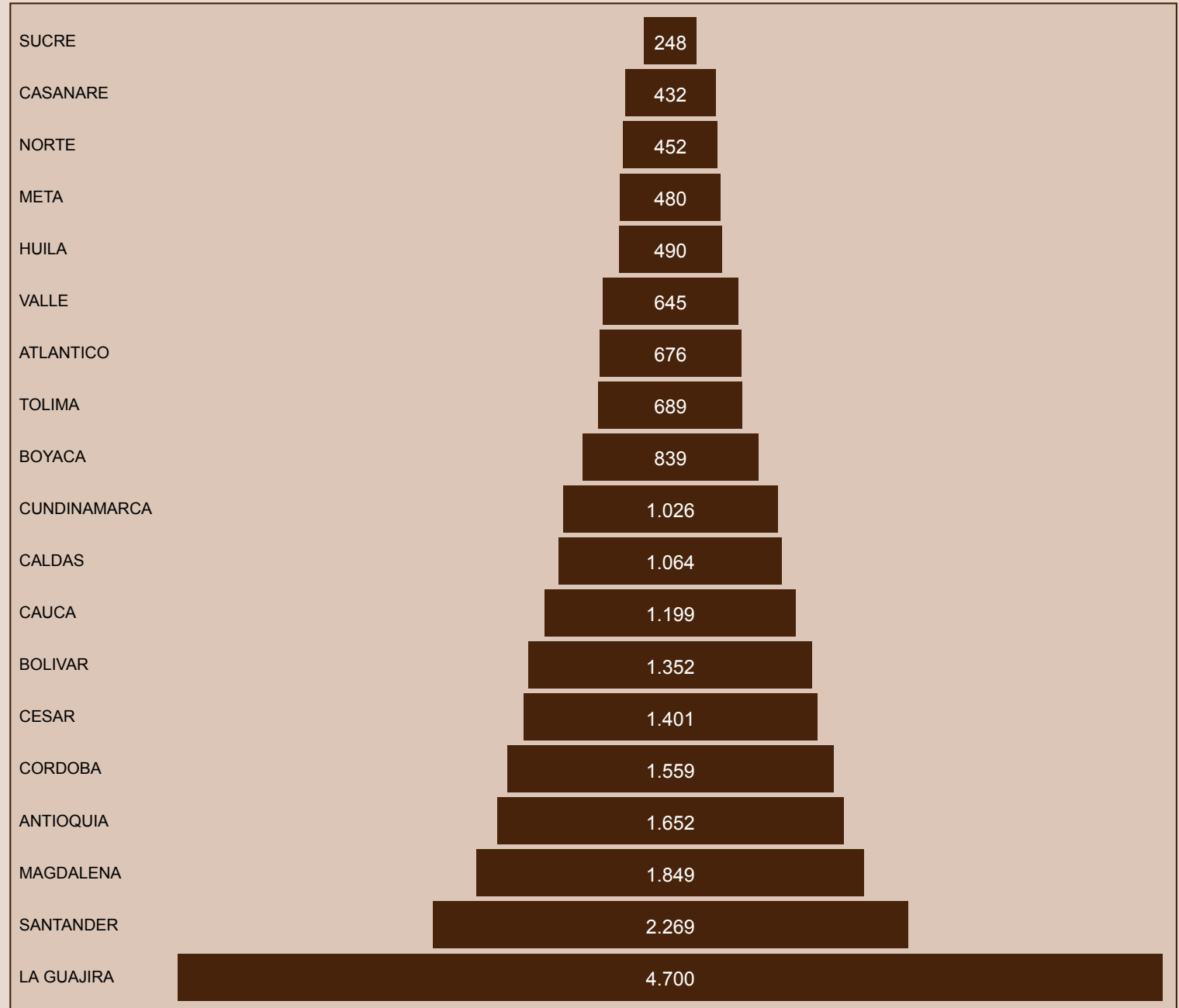
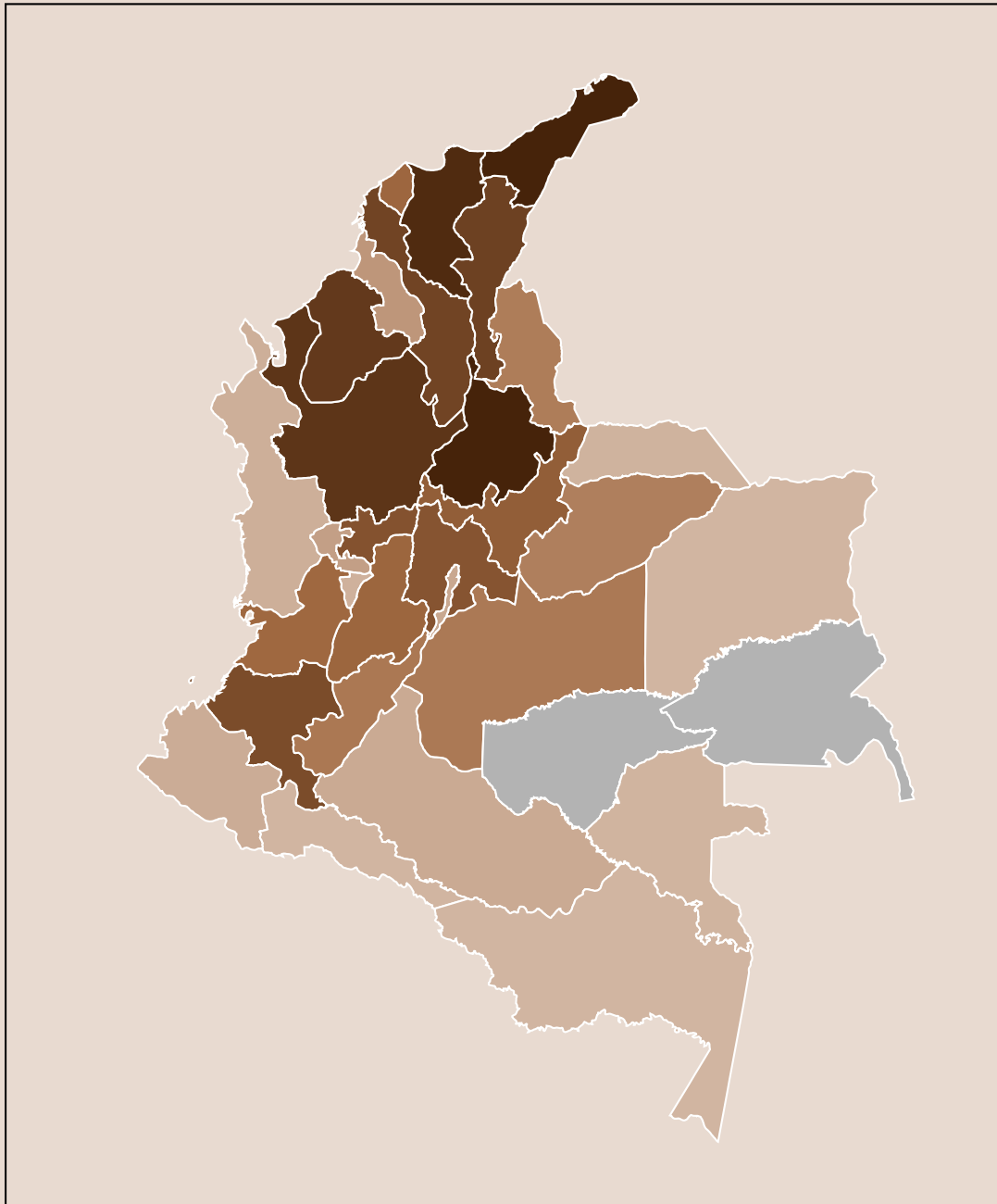


**Capacidad de proyectos vigentes por departamento MW**

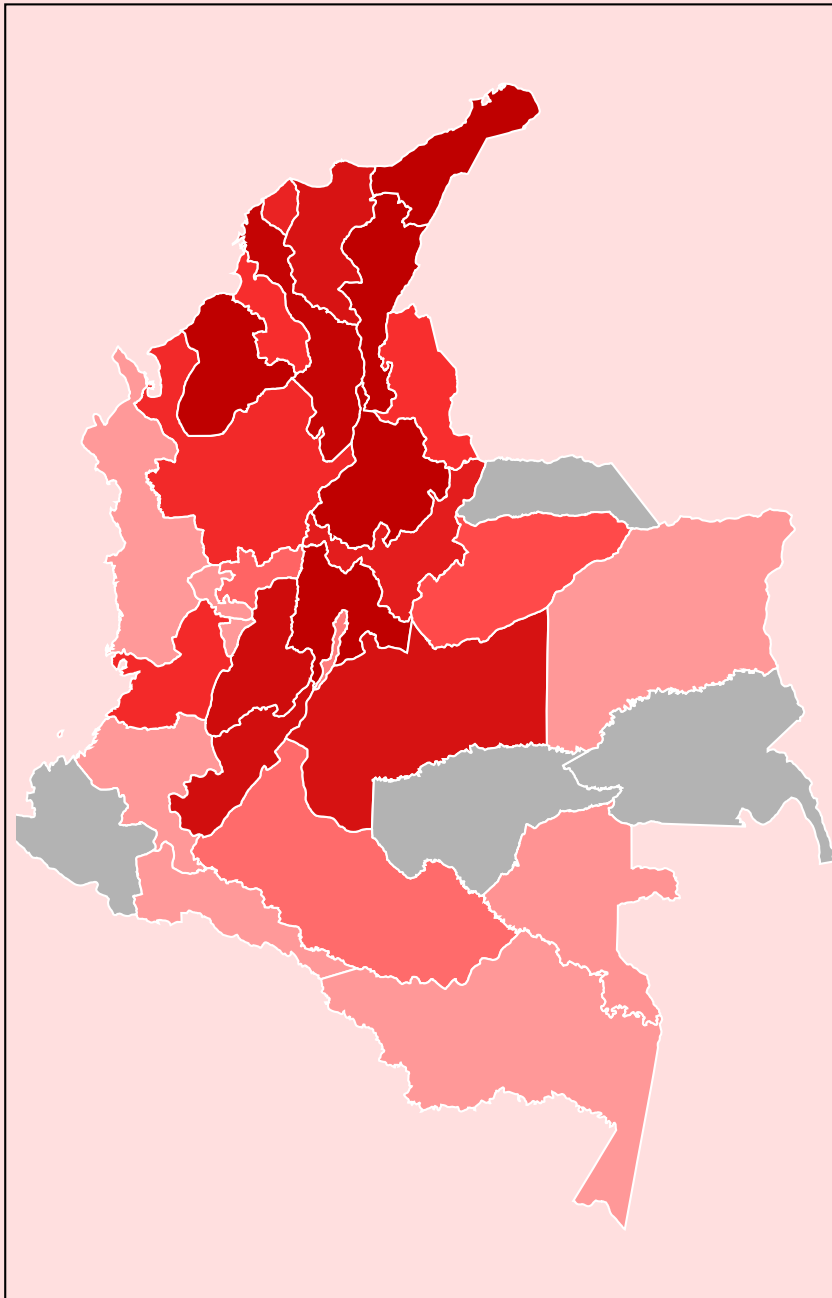
| NC Departamento | BIOMA... | EÓLICO  | HIDRÁULICO | SOLAR   | TÉRMICO | Total          |
|-----------------|----------|---------|------------|---------|---------|----------------|
| LA GUAJIRA      |          | 2.677,3 |            | 2.023,2 |         | <b>4.700,5</b> |
| SANTANDER       | 0,6      |         | 59,6       | 1.409,7 | 799,0   | <b>2.268,9</b> |
| MAGDALENA       |          | 199,8   |            | 449,2   | 1.200,0 | <b>1.849,0</b> |
| ANTIOQUIA       |          |         | 1.023,0    | 279,0   | 350,0   | <b>1.652,0</b> |
| CORDOBA         |          |         |            | 858,7   | 700,0   | <b>1.558,7</b> |
| CESAR           |          |         |            | 1.401,3 |         | <b>1.401,3</b> |
| BOLIVAR         |          | 69,9    |            | 568,1   | 714,0   | <b>1.352,0</b> |
| CAUCA           |          |         | 1.196,7    | 2,0     |         | <b>1.198,7</b> |
| CALDAS          |          |         | 961,0      | 102,9   |         | <b>1.063,9</b> |
| CUNDINAMARCA    | 1,0      |         | 194,9      | 829,7   |         | <b>1.025,6</b> |
| BOYACA          |          | 290,0   | 176,4      | 372,2   |         | <b>838,5</b>   |
| TOLIMA          | 0,4      |         | 181,7      | 506,6   |         | <b>688,7</b>   |
| ATLANTICO       |          | 219,8   |            | 328,4   | 128,0   | <b>676,2</b>   |
| VALLE           |          |         | 13,6       | 275,5   | 355,8   | <b>644,8</b>   |

| NC Departamento | BIOMA... | HIDRÁULICO | SOLAR   | TÉRMICO | Total          |
|-----------------|----------|------------|---------|---------|----------------|
| HUILA           |          |            | 490,402 |         | <b>490,402</b> |
| META            | 2,400    |            | 455,365 | 21,870  | <b>479,635</b> |
| NORTE           | 0,600    | 29,700     | 241,408 | 180,000 | <b>451,708</b> |
| CASANARE        | 25,000   |            | 155,011 | 251,770 | <b>431,781</b> |
| SUCRE           |          |            | 248,199 |         | <b>248,199</b> |
| RISARALDA       |          | 166,520    | 6,519   |         | <b>173,039</b> |
| BOGOTA D.C.     | 28,760   |            | 52,651  | 26,000  | <b>107,411</b> |
| CAQUETA         |          |            | 90,610  |         | <b>90,610</b>  |
| NARIÑO          |          | 70,900     |         |         | <b>70,900</b>  |
| CHOCO           |          | 48,300     | 0,723   |         | <b>49,023</b>  |
| QUINDIO         |          | 30,710     | 0,060   |         | <b>30,770</b>  |
| ARAUCA          |          | 19,950     |         |         | <b>19,950</b>  |
| VAUPES          |          |            | 10,800  |         | <b>10,800</b>  |
| AMAZONAS        |          |            | 1,830   |         | <b>1,830</b>   |
| VICHADA         |          |            | 1,619   |         | <b>1,619</b>   |
| PUTUMAYO        |          |            | 0,567   |         | <b>0,567</b>   |

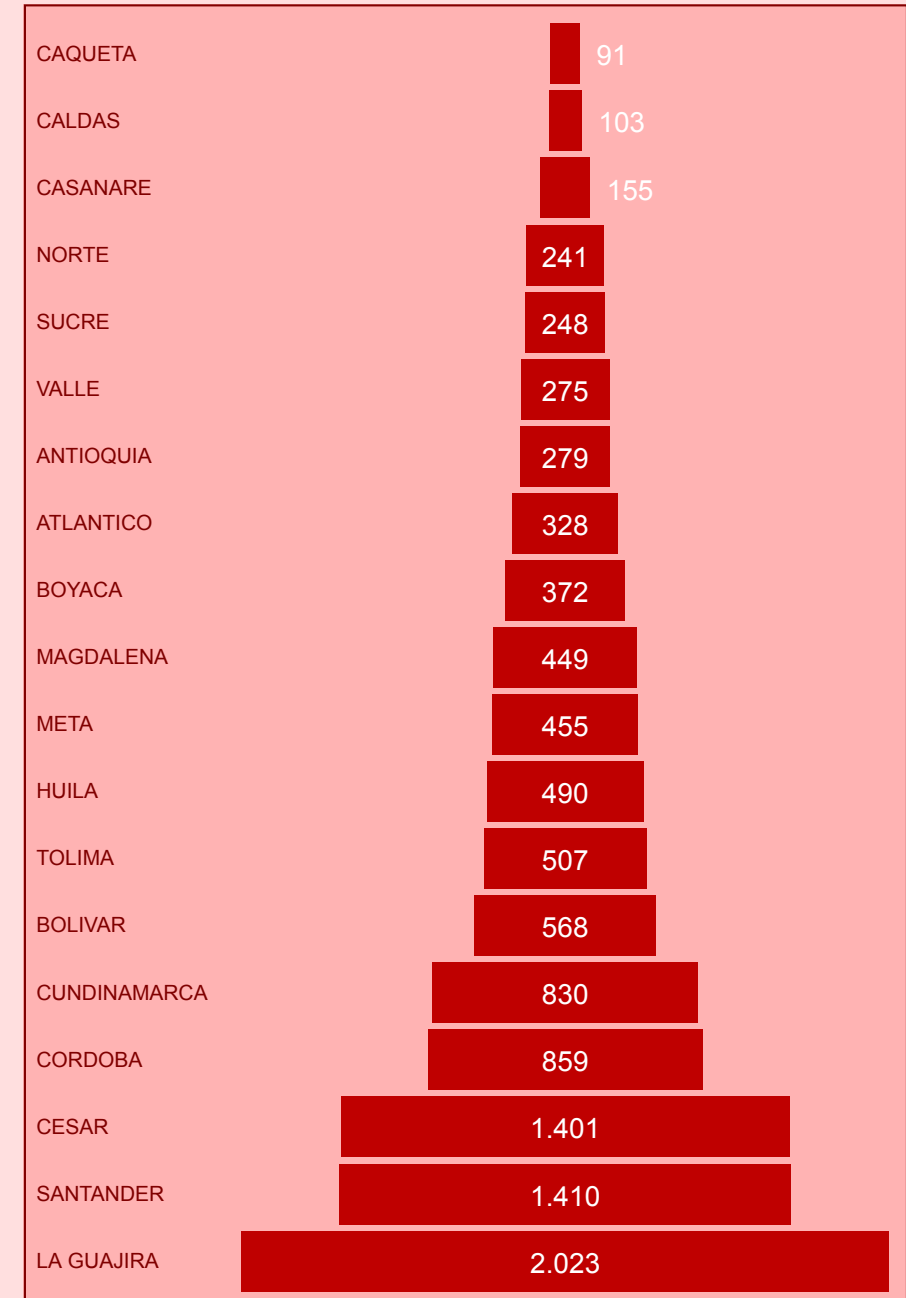
Capacidad de proyectos vigentes por departamento MW



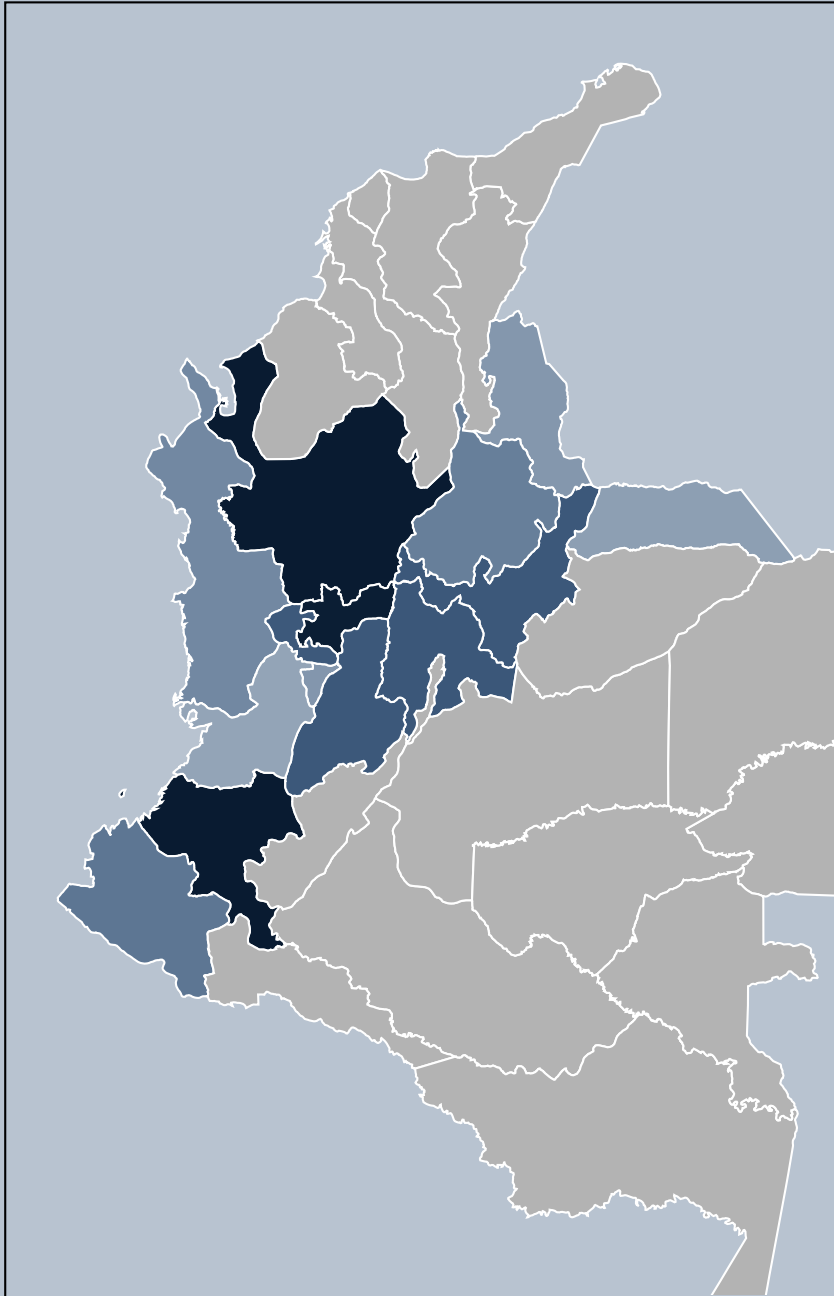
Capacidad de proyectos solares vigentes por departamento MW



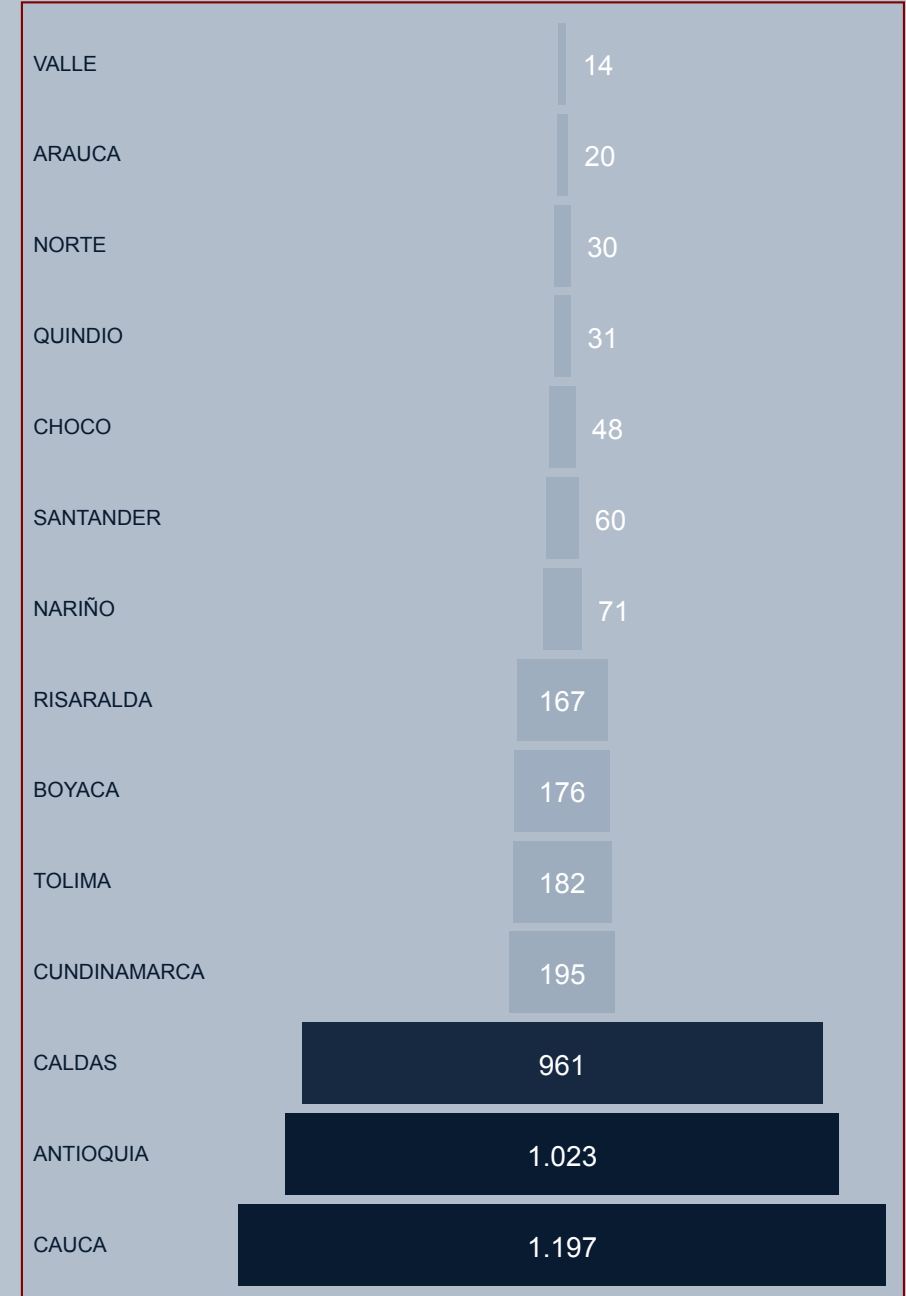
| NC Departamento | Count of Codigo Proyecto | Capacidad MW     |
|-----------------|--------------------------|------------------|
| LA GUAJIRA      | 14                       | 2.023,20         |
| SANTANDER       | 26                       | 1.409,66         |
| CESAR           | 29                       | 1.401,29         |
| CORDOBA         | 24                       | 858,70           |
| CUNDINAMARCA    | 25                       | 829,74           |
| BOLIVAR         | 24                       | 568,13           |
| TOLIMA          | 17                       | 506,59           |
| HUILA           | 21                       | 490,40           |
| META            | 23                       | 455,37           |
| MAGDALENA       | 10                       | 449,24           |
| BOYACA          | 13                       | 372,15           |
| ATLANTICO       | 21                       | 328,38           |
| ANTIOQUIA       | 21                       | 279,02           |
| VALLE           | 47                       | 275,46           |
| SUCRE           | 9                        | 248,20           |
| NORTE           | 14                       | 241,41           |
| CASANARE        | 6                        | 155,01           |
| CALDAS          | 7                        | 102,94           |
| CAQUETA         | 3                        | 90,61            |
| BOGOTA D.C.     | 22                       | 52,65            |
| VAUPES          | 2                        | 10,80            |
| RISARALDA       | 9                        | 6,52             |
| CAUCA           | 8                        | 1,97             |
| AMAZONAS        | 2                        | 1,83             |
| VICHADA         | 3                        | 1,62             |
| CHOCO           | 1                        | 0,72             |
| PUTUMAYO        | 1                        | 0,57             |
| QUINDIO         | 1                        | 0,06             |
| <b>Total</b>    | <b>403</b>               | <b>11.162,25</b> |



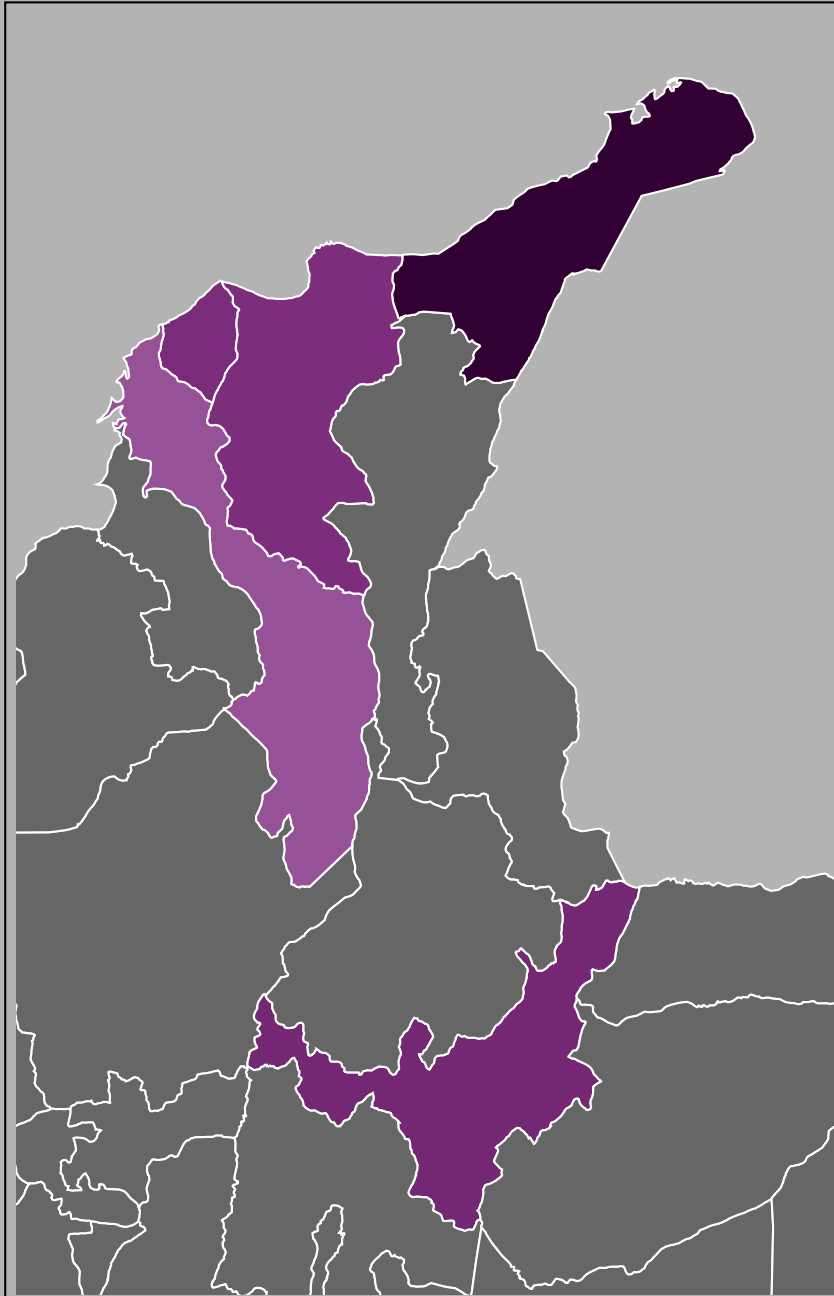
Capacidad de proyectos hidráulicos vigentes por departamento MW



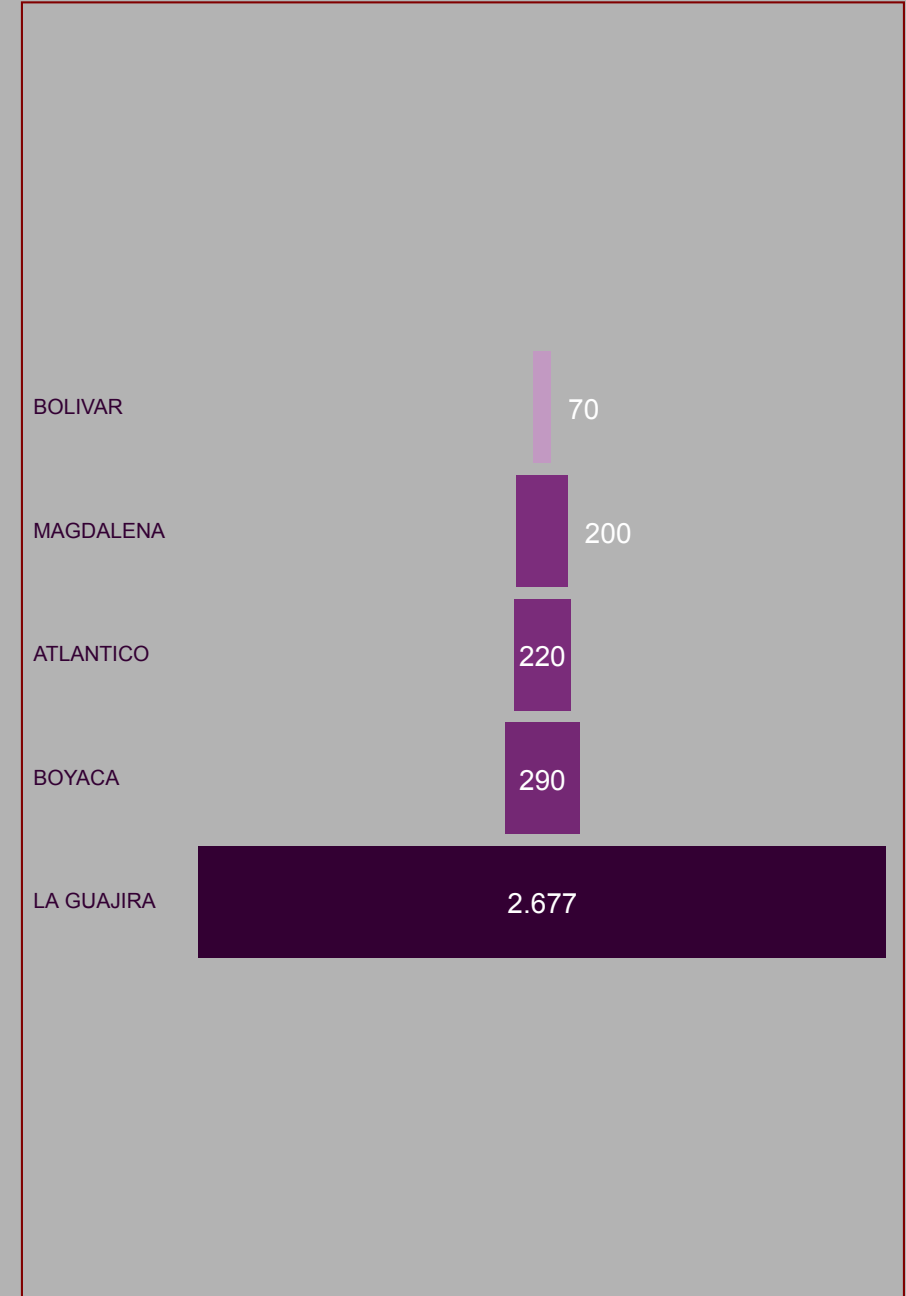
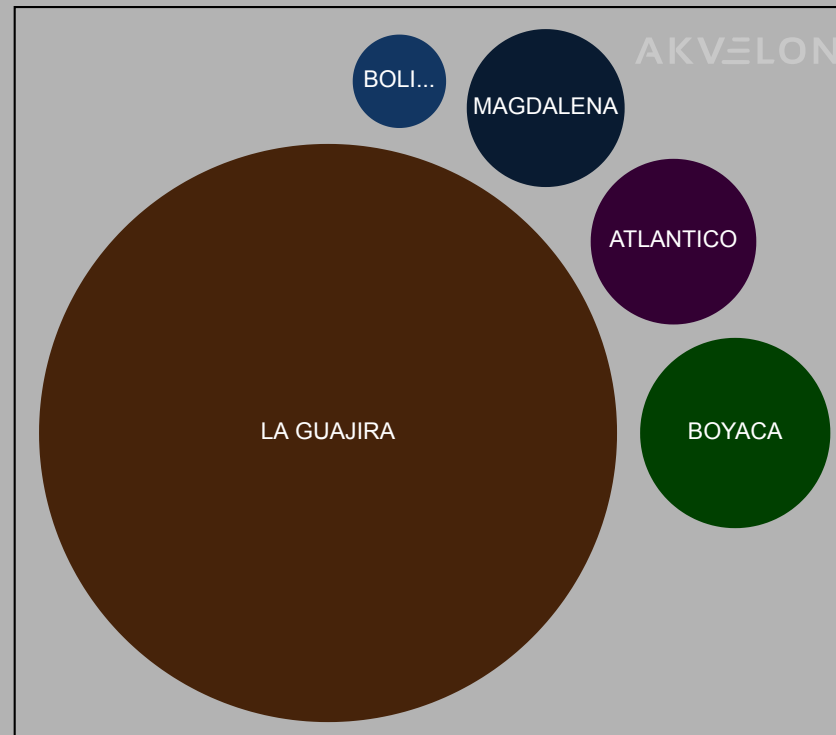
| NC Departamento | Count of Codigo Proyecto | Capacidad MW    |
|-----------------|--------------------------|-----------------|
| VALLE           | 2                        | 13,56           |
| ARAUCA          | 1                        | 19,95           |
| NORTE           | 2                        | 29,70           |
| QUINDIO         | 7                        | 30,71           |
| CHOCO           | 1                        | 48,30           |
| SANTANDER       | 3                        | 59,64           |
| NARIÑO          | 2                        | 70,90           |
| RISARALDA       | 18                       | 166,52          |
| BOYACA          | 5                        | 176,35          |
| TOLIMA          | 8                        | 181,75          |
| CUNDINAMARCA    | 3                        | 194,89          |
| CALDAS          | 10                       | 960,97          |
| ANTIOQUIA       | 48                       | 1.022,99        |
| CAUCA           | 18                       | 1.196,70        |
| <b>Total</b>    | <b>128</b>               | <b>4.172,93</b> |



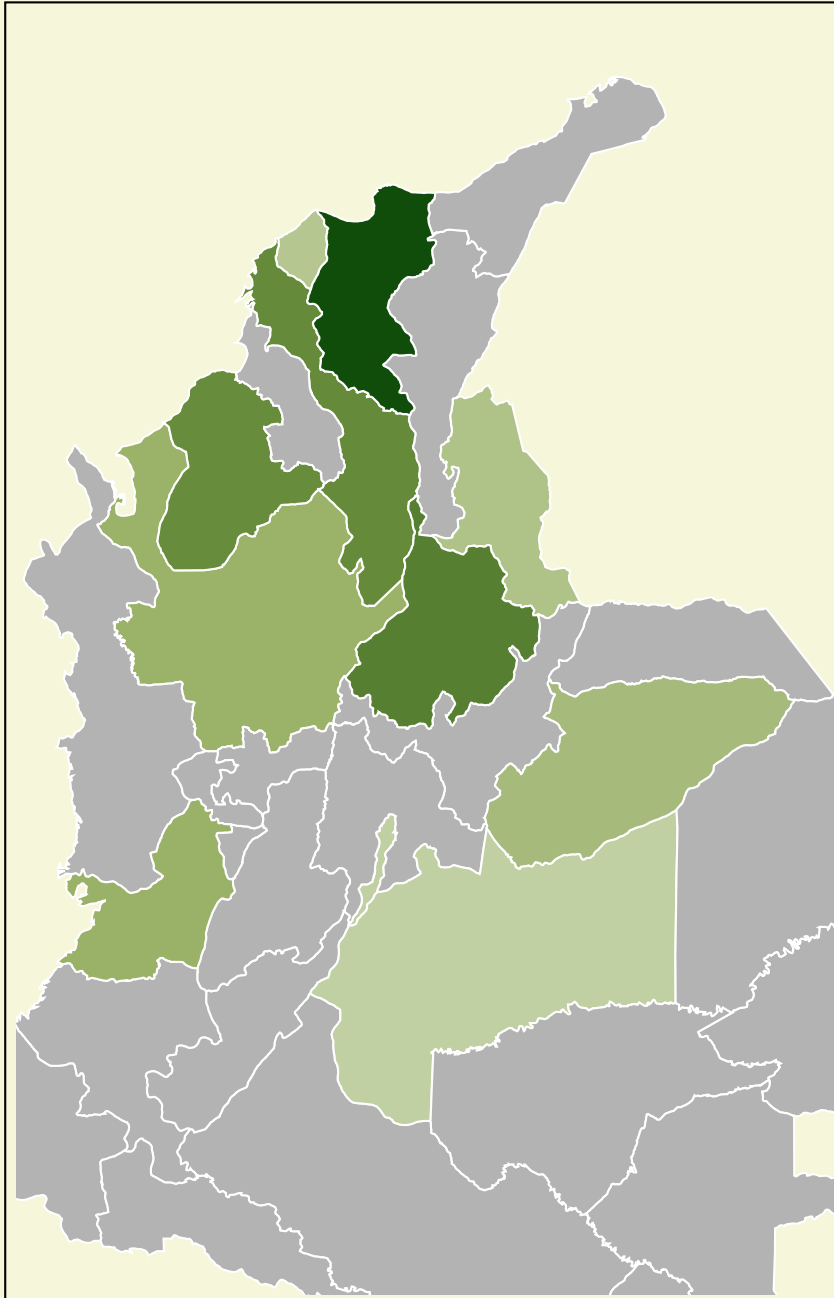
Capacidad de proyectos eólicos vigentes por departamento MW



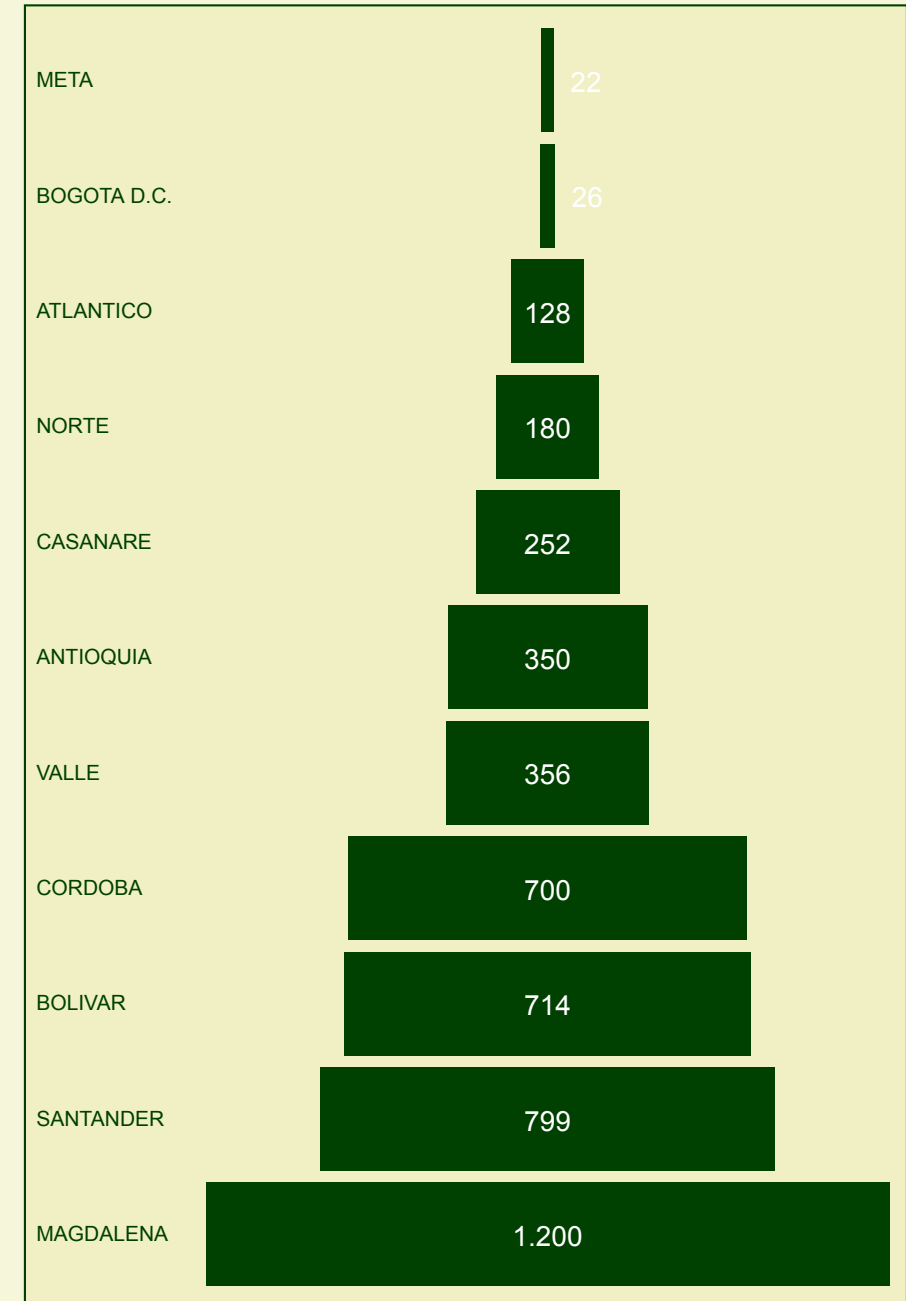
| NC Departamento | Count of Codigo Proyecto | Capacidad MW    |
|-----------------|--------------------------|-----------------|
| LA GUAJIRA      | 17                       | 2.677,25        |
| BOYACA          | 3                        | 290,00          |
| ATLANTICO       | 3                        | 219,80          |
| MAGDALENA       | 2                        | 199,80          |
| BOLIVAR         | 2                        | 69,90           |
| <b>Total</b>    | <b>27</b>                | <b>3.456,75</b> |



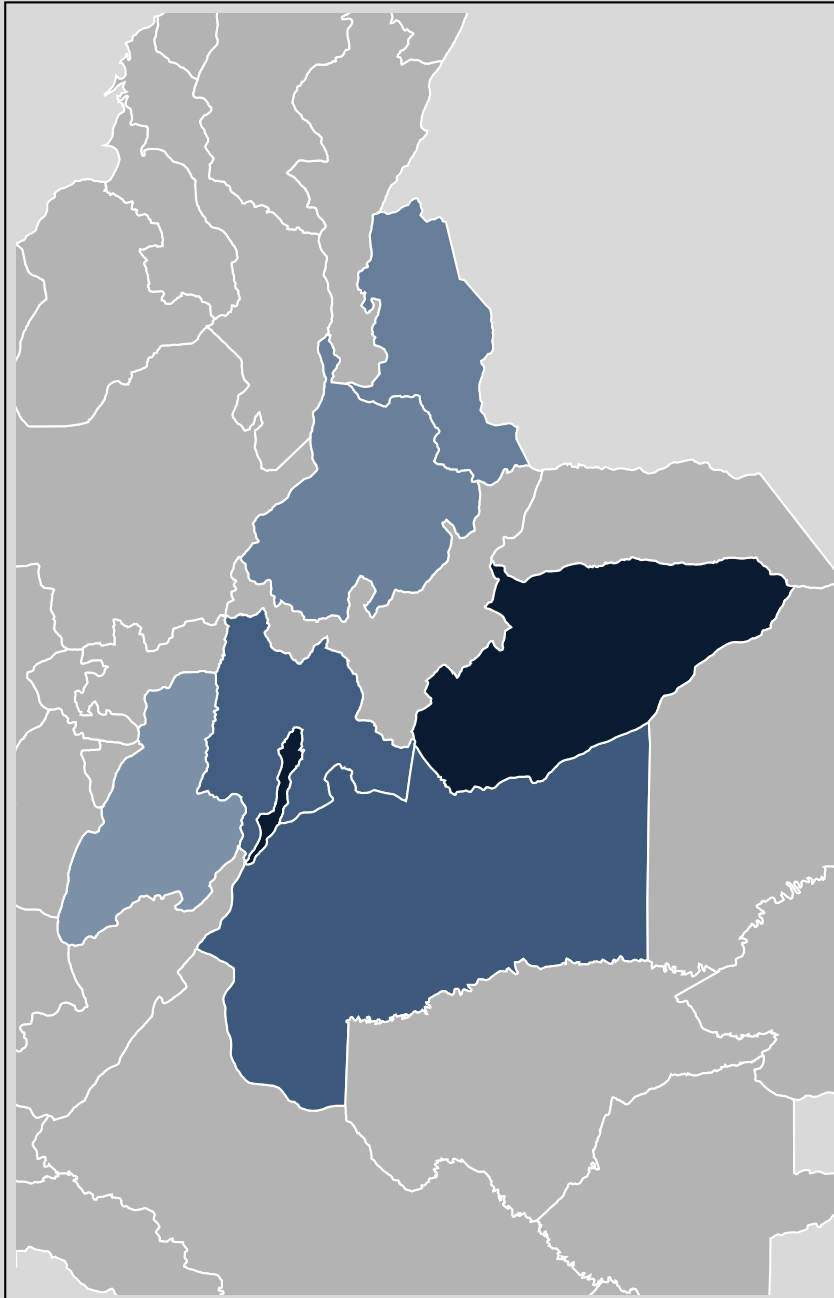
Capacidad de proyectos térmicos vigentes por departamento MW



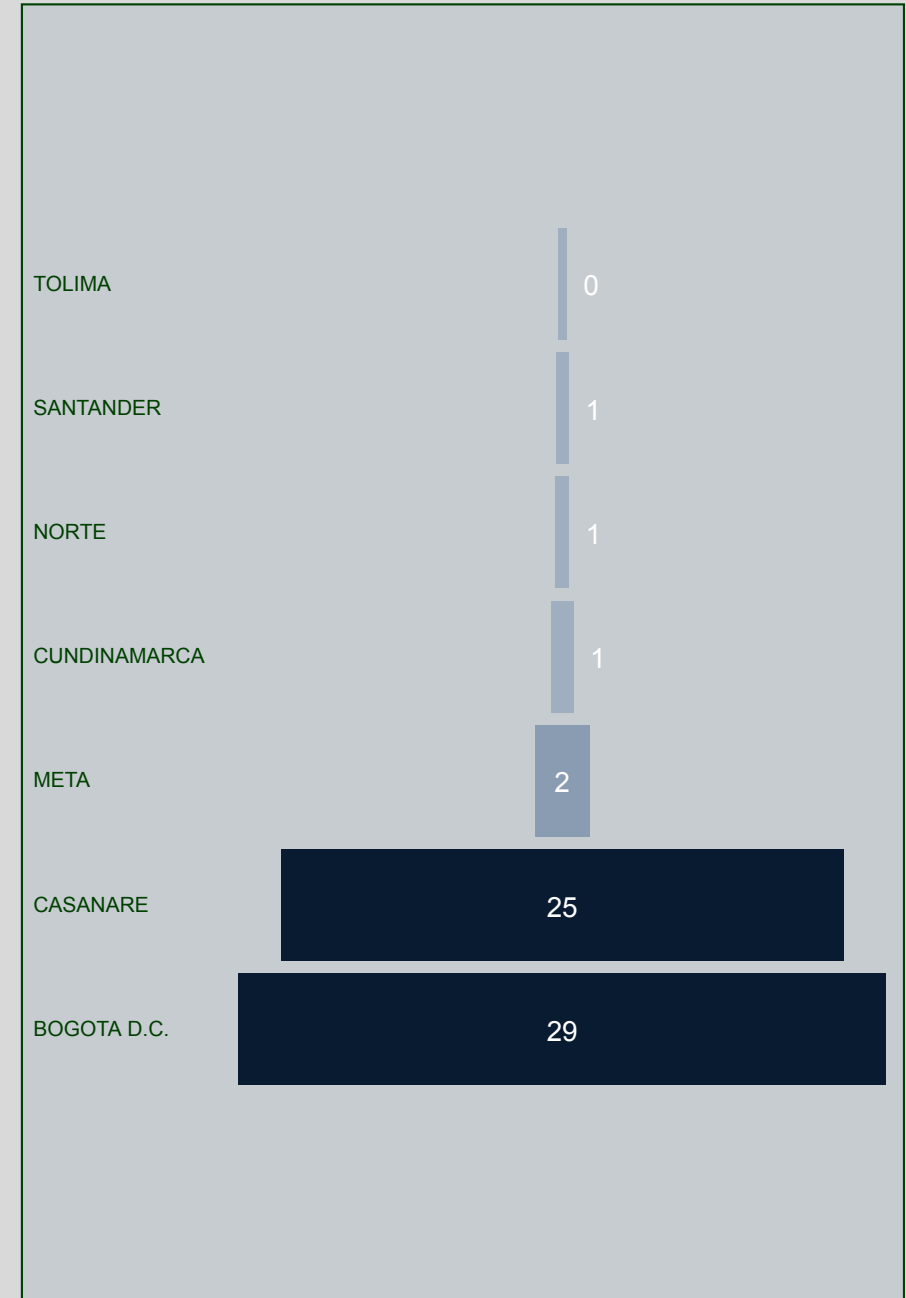
| NC Departamento | Count of Codigo Proyecto | Capacidad MW    |
|-----------------|--------------------------|-----------------|
| MAGDALENA       | 2                        | 1.200,00        |
| SANTANDER       | 2                        | 799,00          |
| BOLIVAR         | 5                        | 714,00          |
| CORDOBA         | 3                        | 700,00          |
| VALLE           | 5                        | 355,80          |
| ANTIOQUIA       | 1                        | 350,00          |
| CASANARE        | 7                        | 251,77          |
| NORTE           | 1                        | 180,00          |
| ATLANTICO       | 2                        | 128,00          |
| BOGOTA D.C.     | 2                        | 26,00           |
| META            | 1                        | 21,87           |
| <b>Total</b>    | <b>31</b>                | <b>4.726,44</b> |



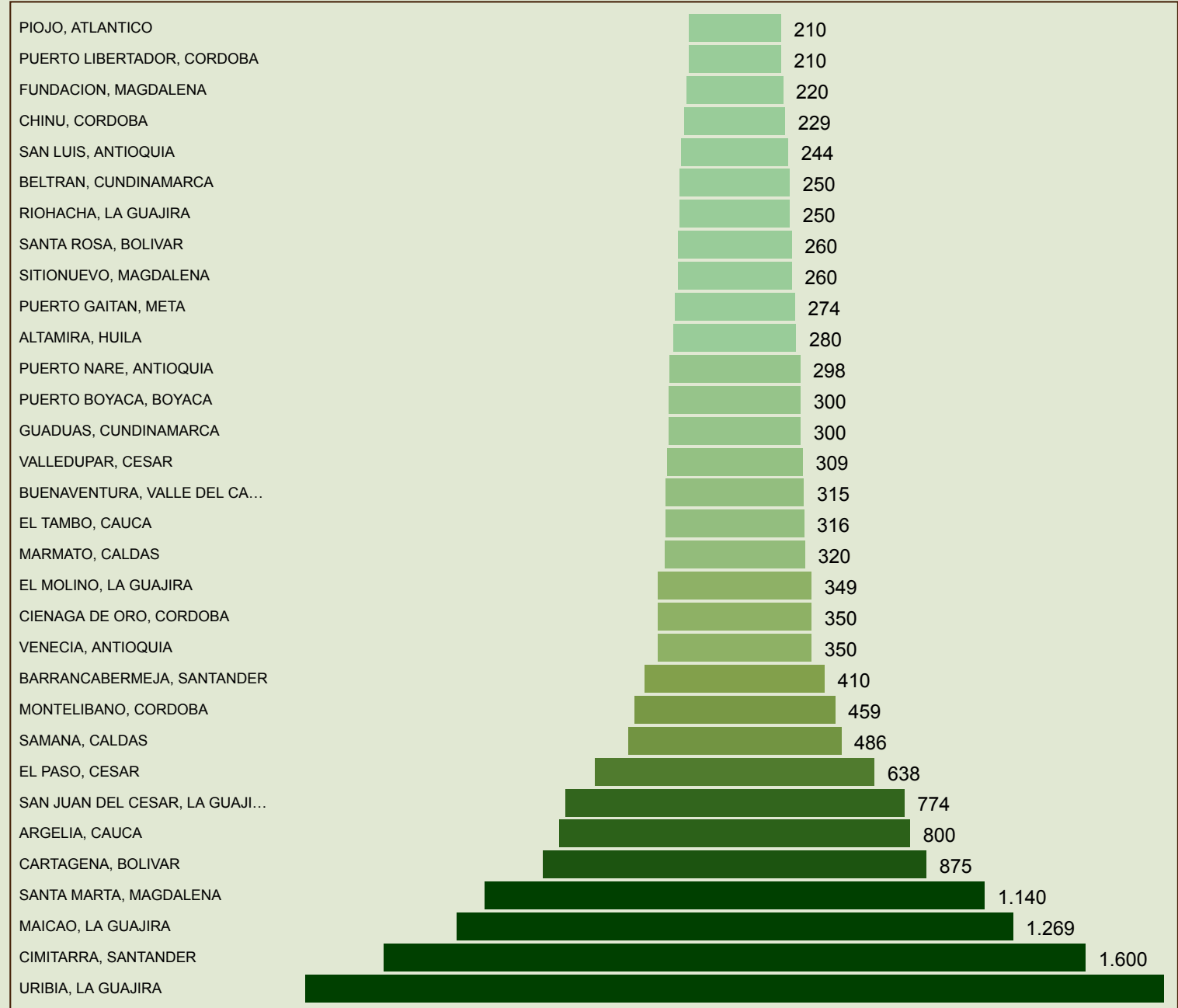
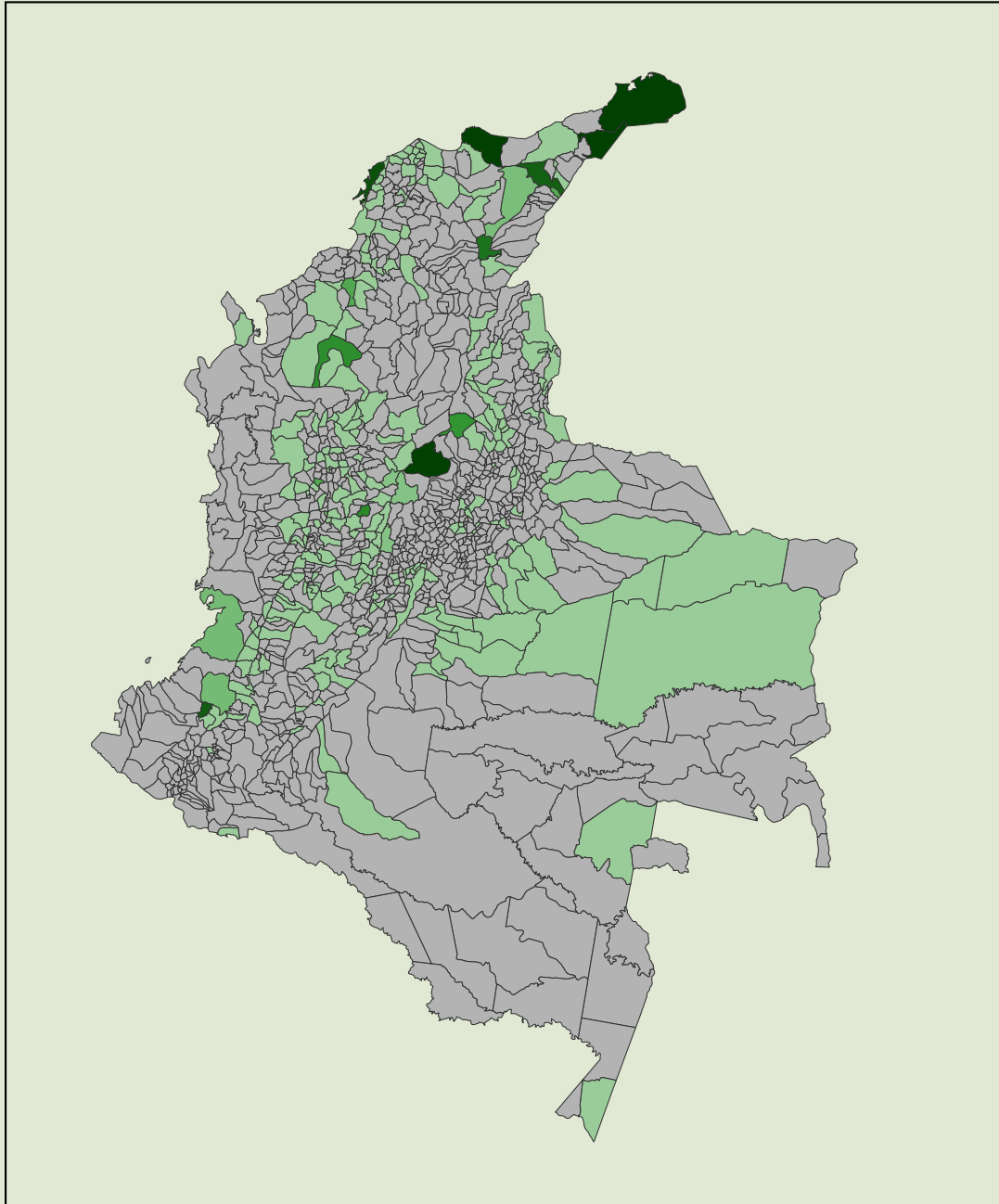
Capacidad de proyectos de biomasa vigentes por departamento MW



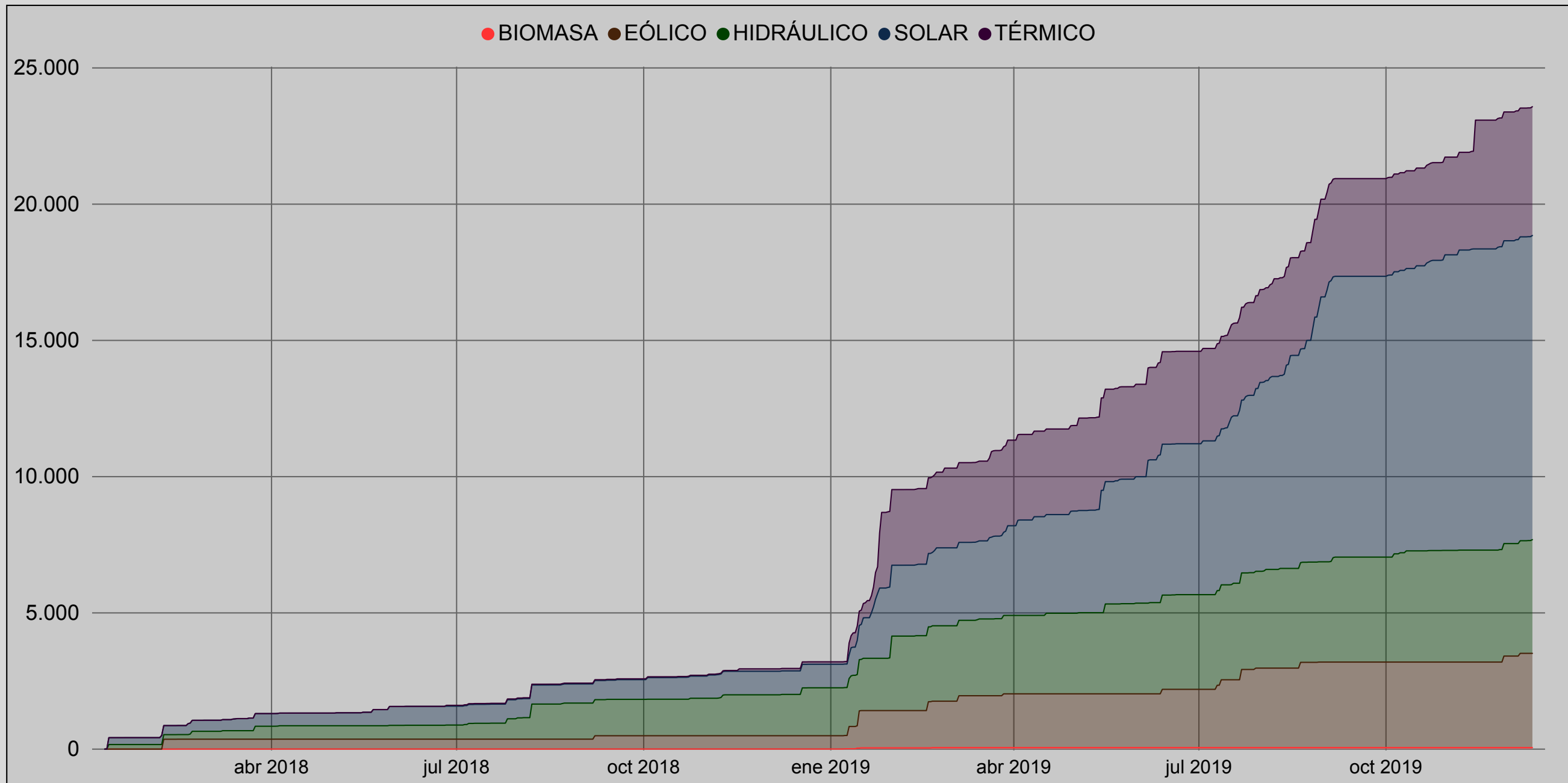
| NC Departamento | Count of Codigo Proyecto | Capacidad MW |
|-----------------|--------------------------|--------------|
| BOGOTA D.C.     | 3                        | 28,76        |
| CASANARE        | 1                        | 25,00        |
| META            | 1                        | 2,40         |
| CUNDINAMARCA    | 1                        | 1,00         |
| NORTE           | 1                        | 0,60         |
| SANTANDER       | 2                        | 0,57         |
| TOLIMA          | 2                        | 0,38         |
| <b>Total</b>    | <b>11</b>                | <b>58,71</b> |



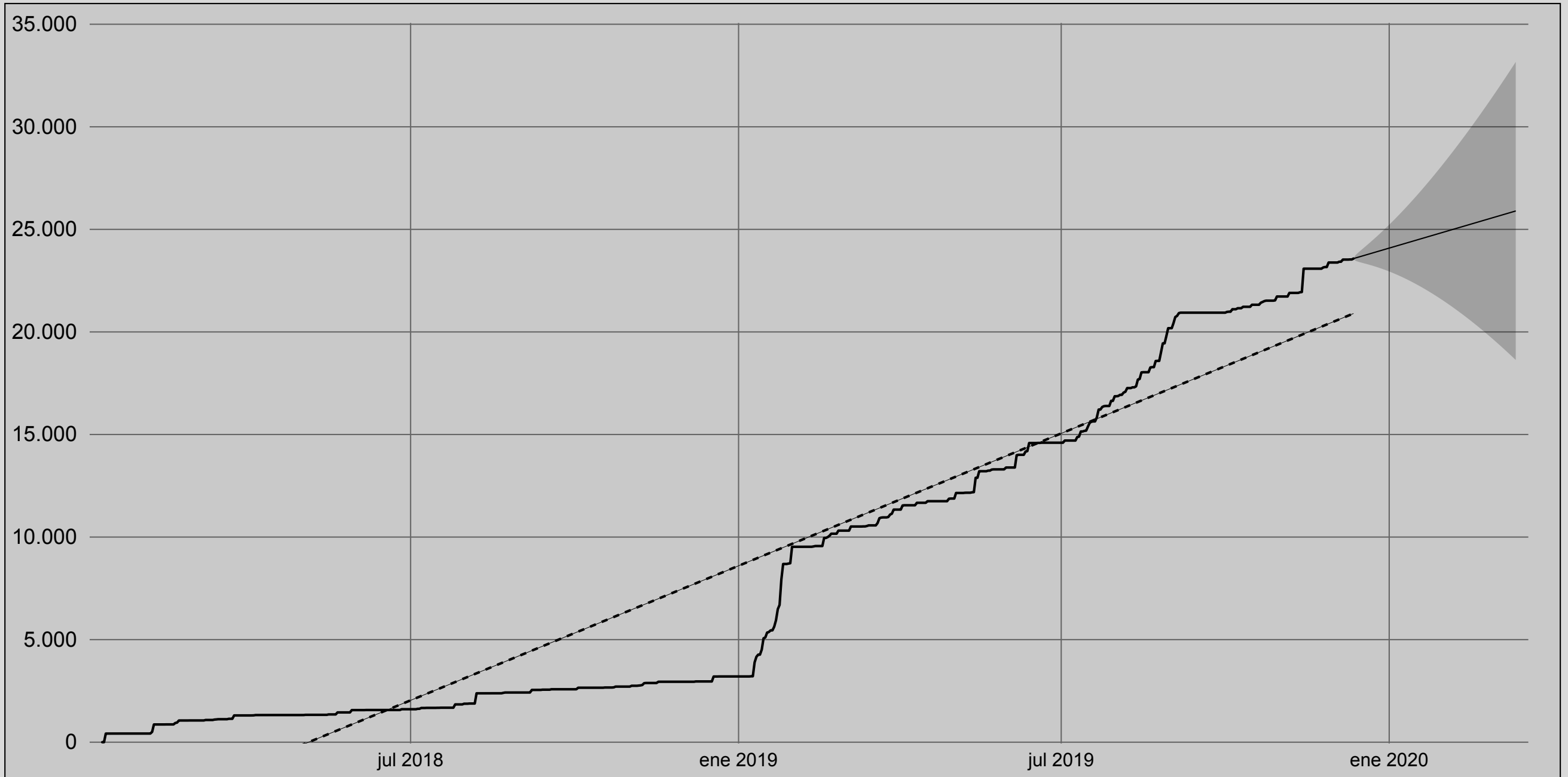
Capacidad de proyectos vigentes por municipio MW



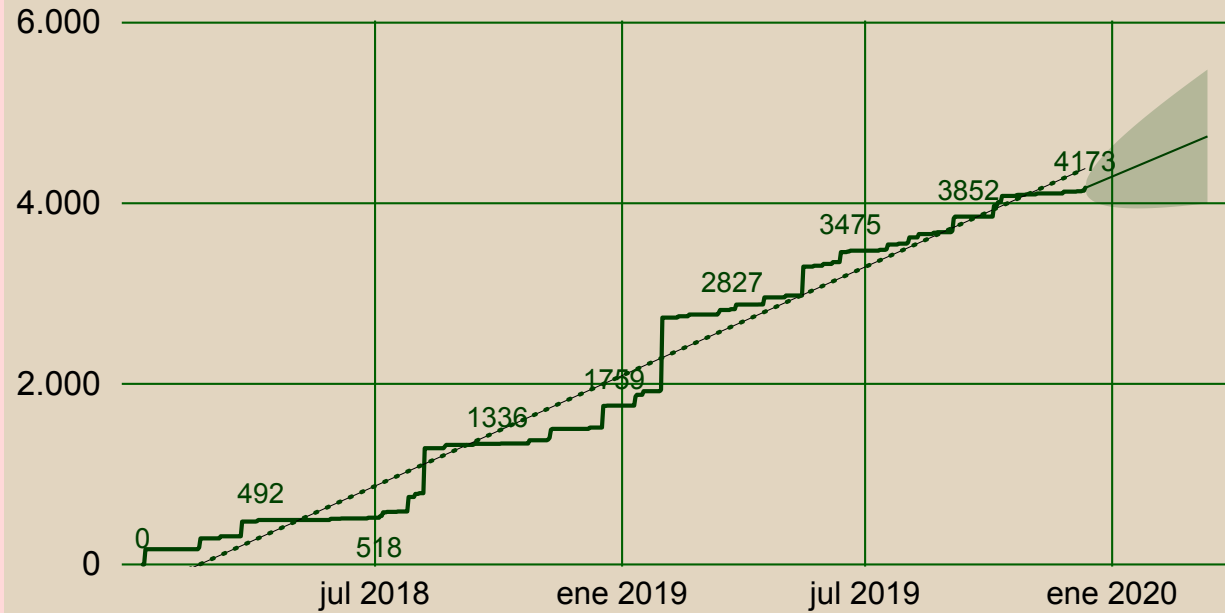
Potencia acumulada de proyectos vigentes según el tipo MW



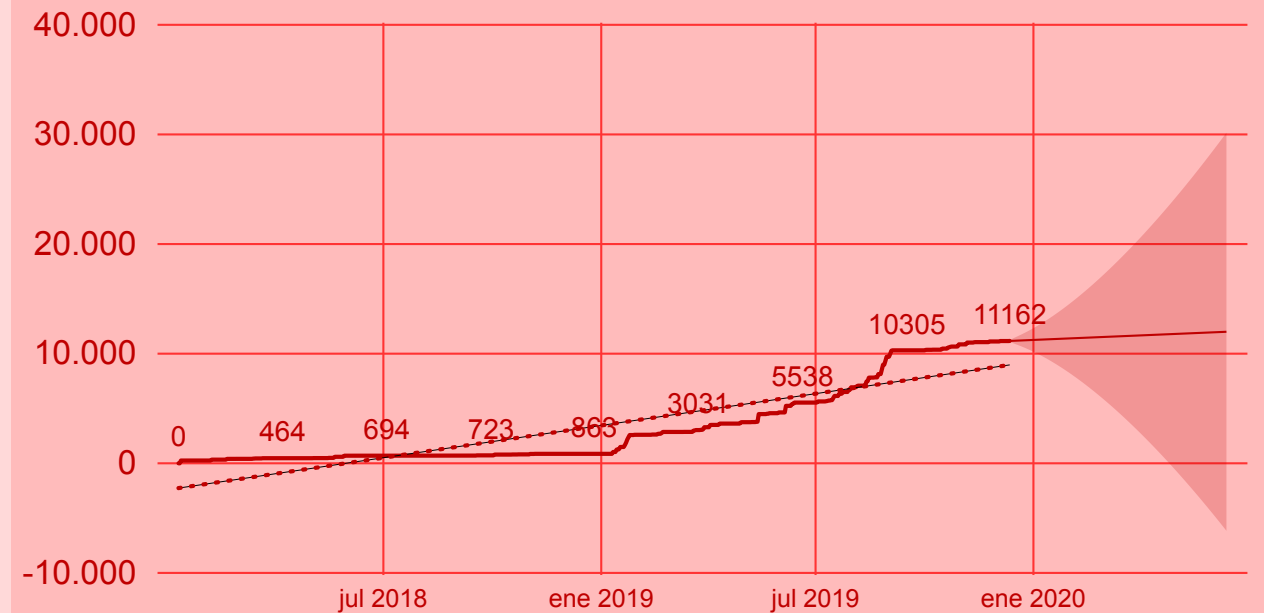
Prospección de la potencia acumulada de proyectos vigentes MW



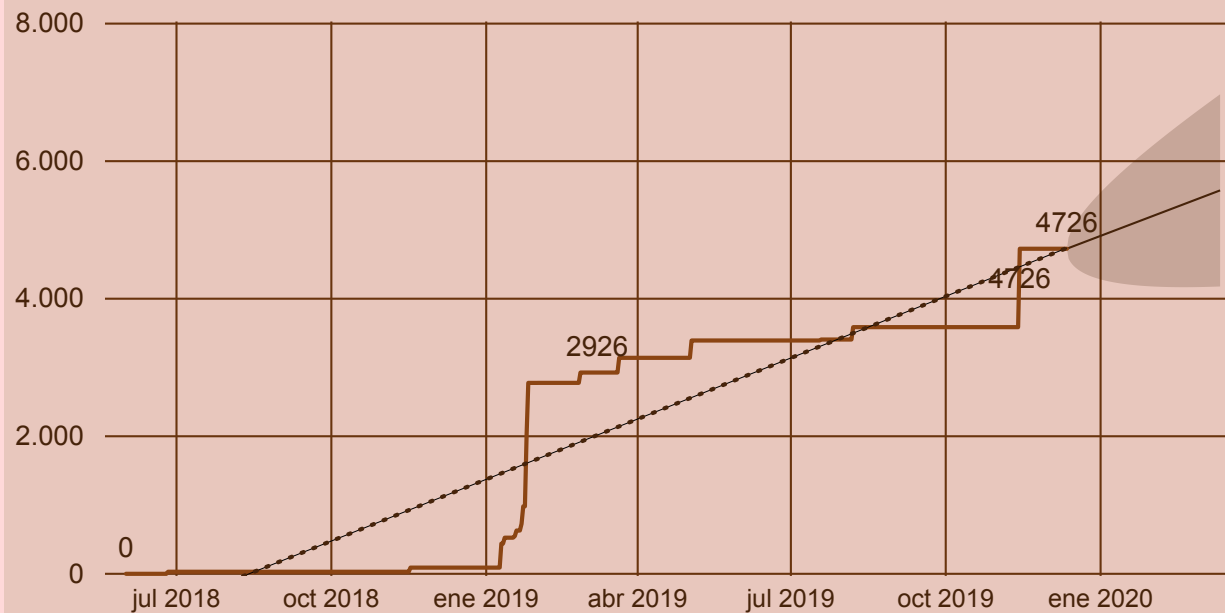
Proyección de la potencia de proyectos hidráulicos



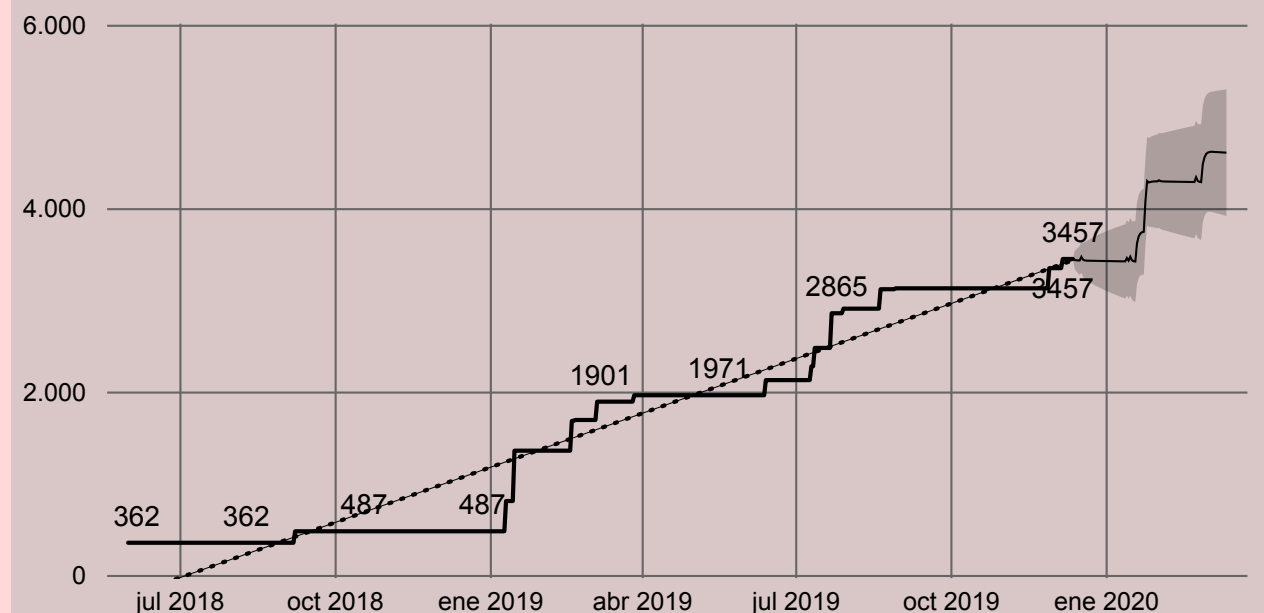
Proyección de la potencia de proyectos solares



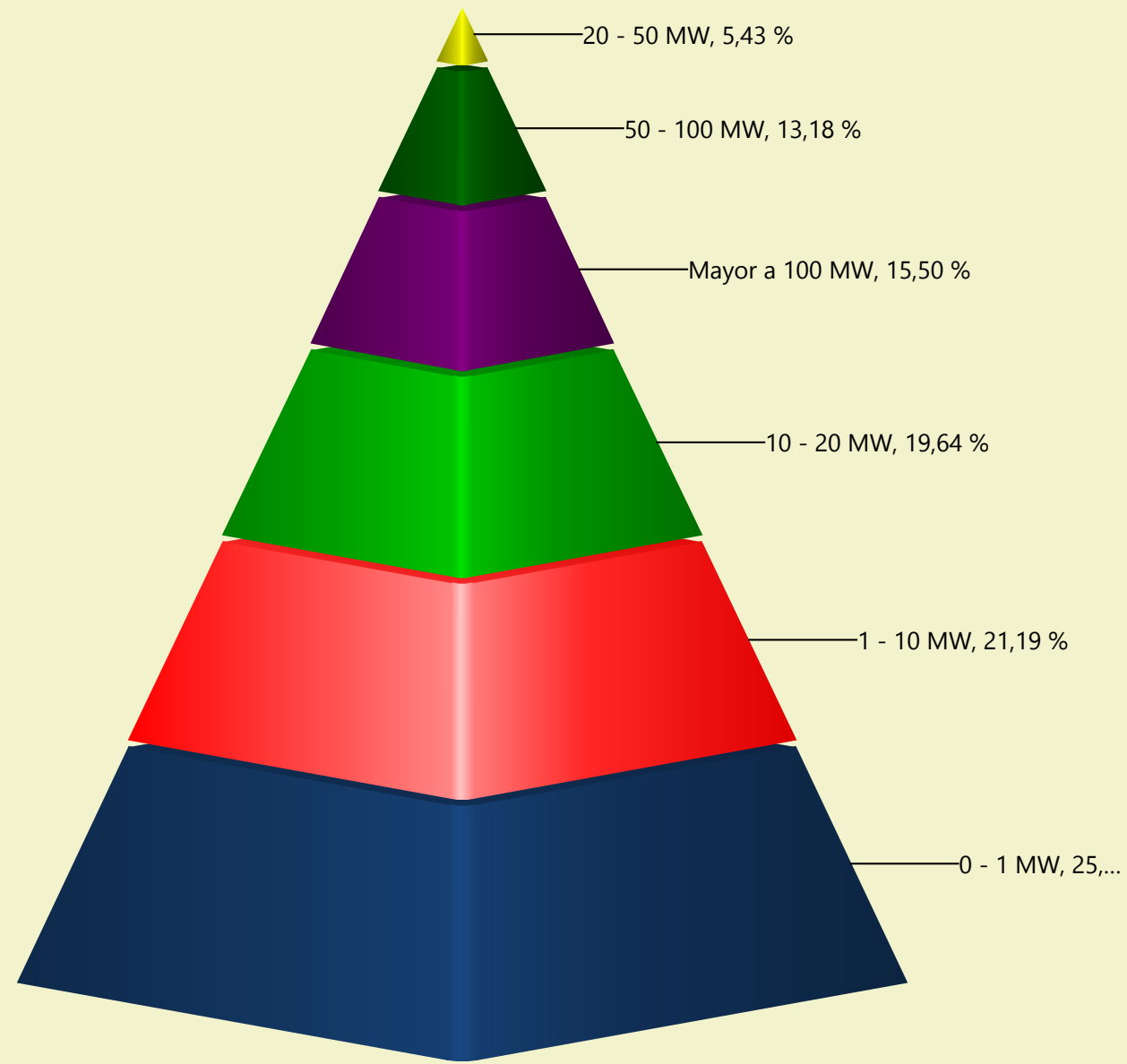
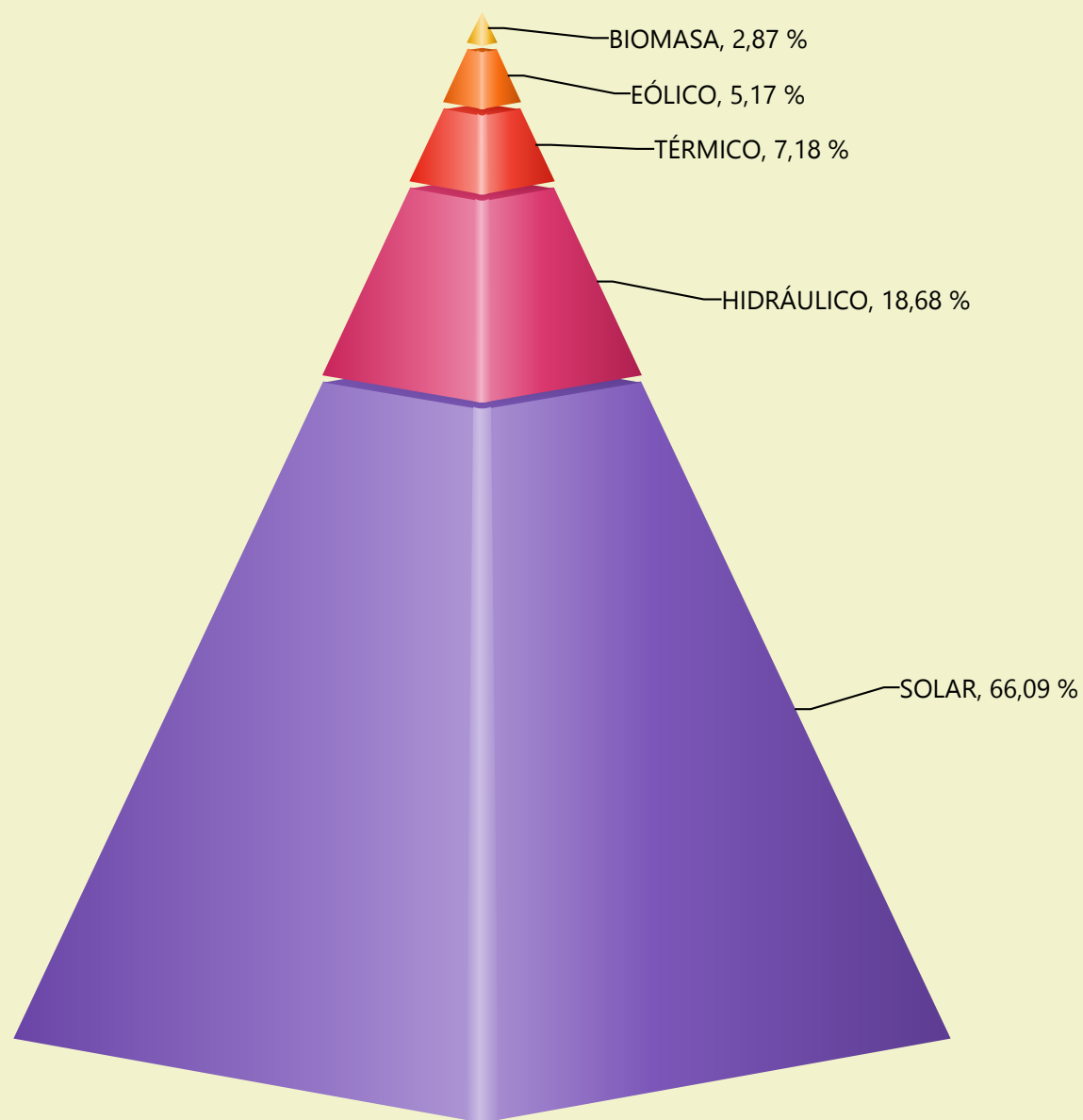
Proyección de la potencia de proyectos térmicos

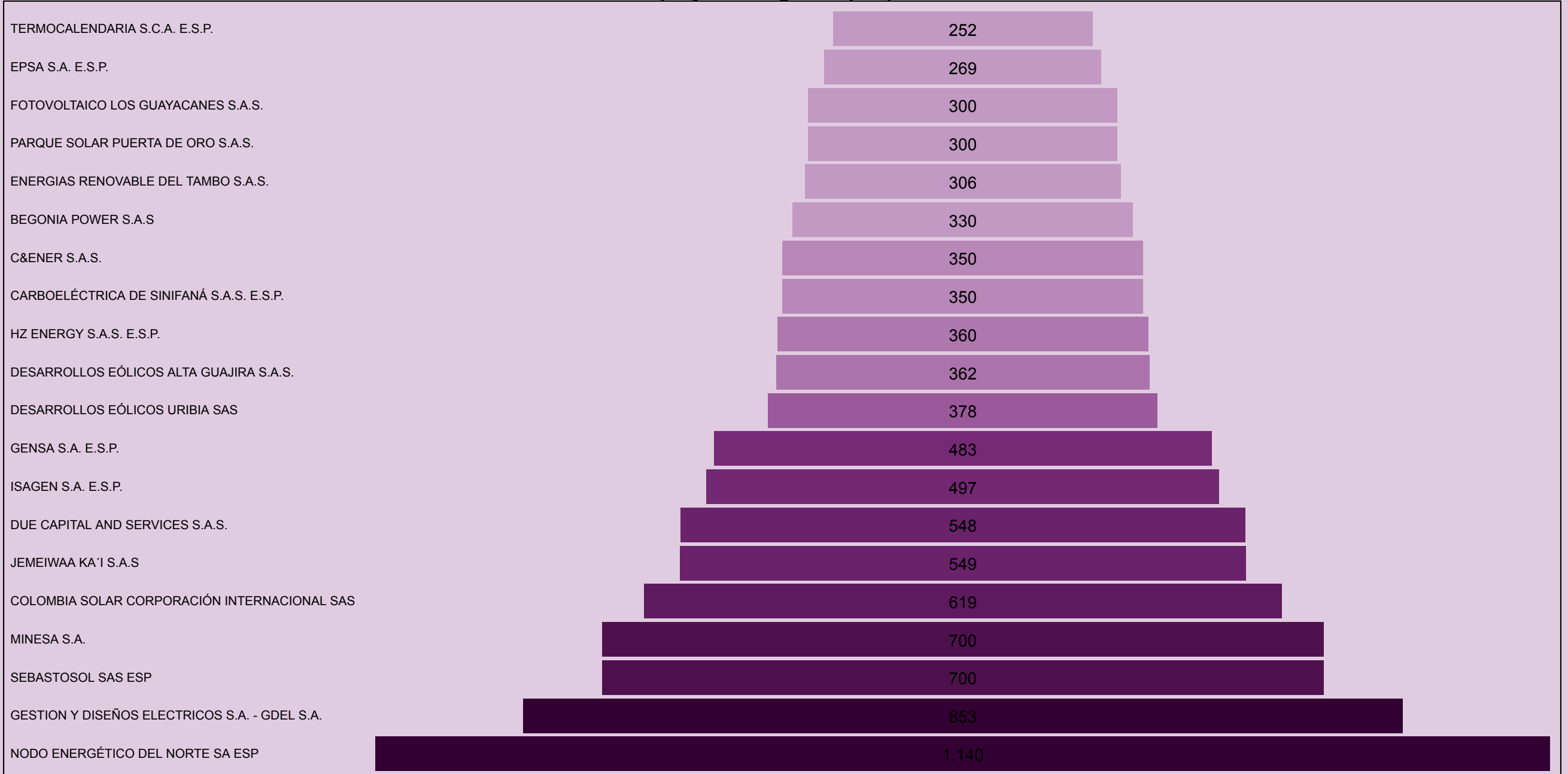


Proyección de la potencia de proyectos eólicos

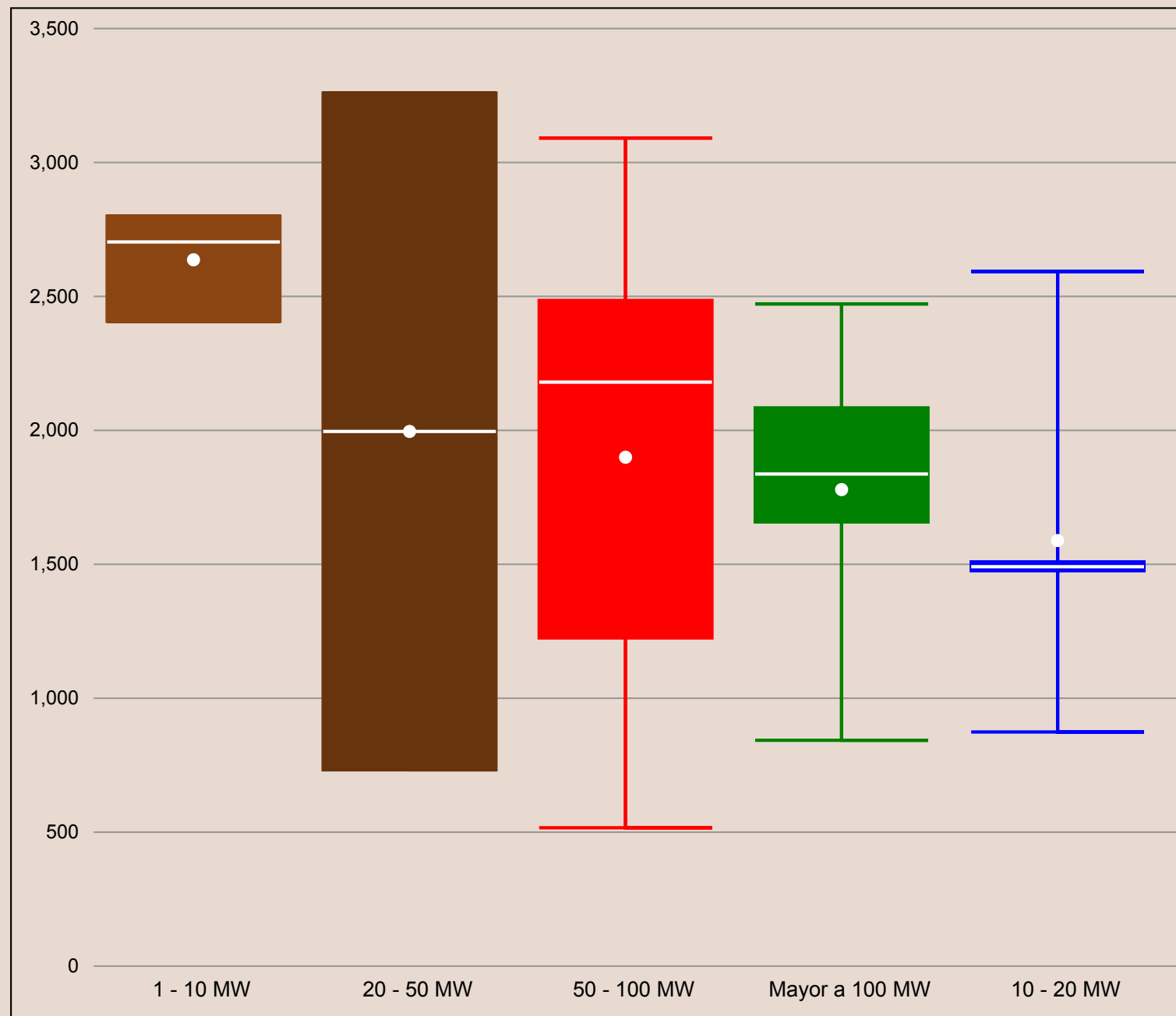
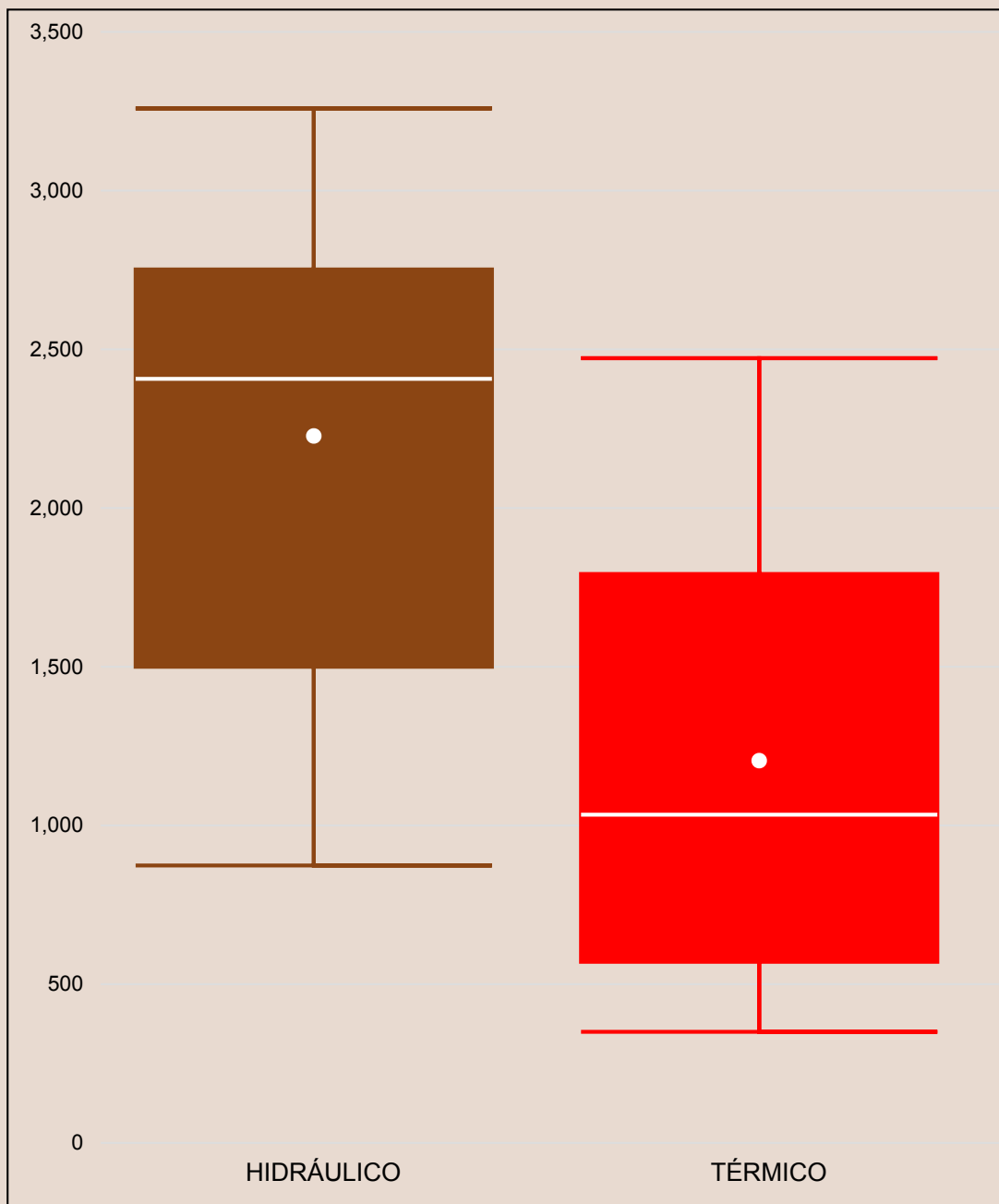


Número de promotores de proyectos vigentes por tipo y por rango de potencia

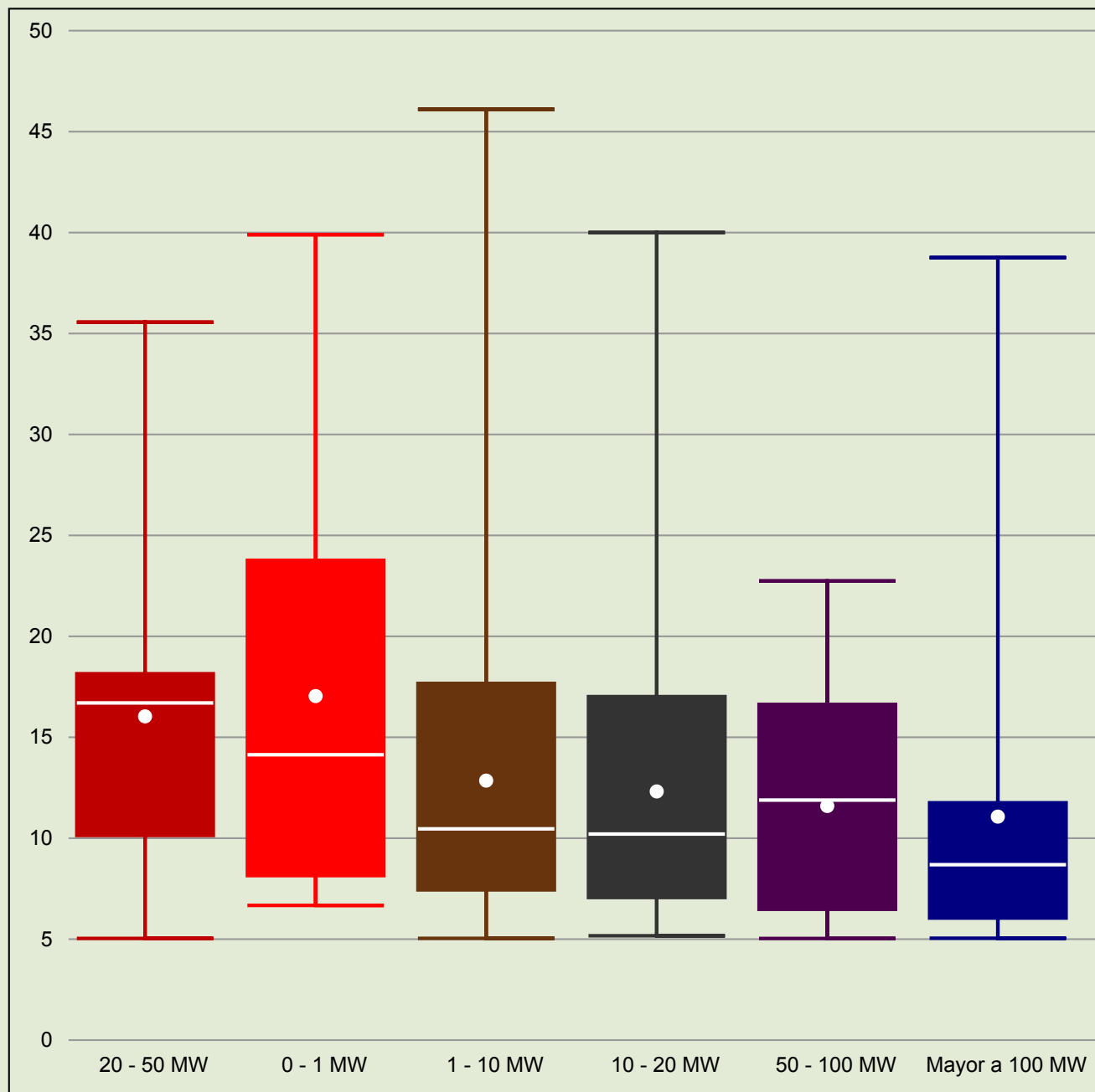
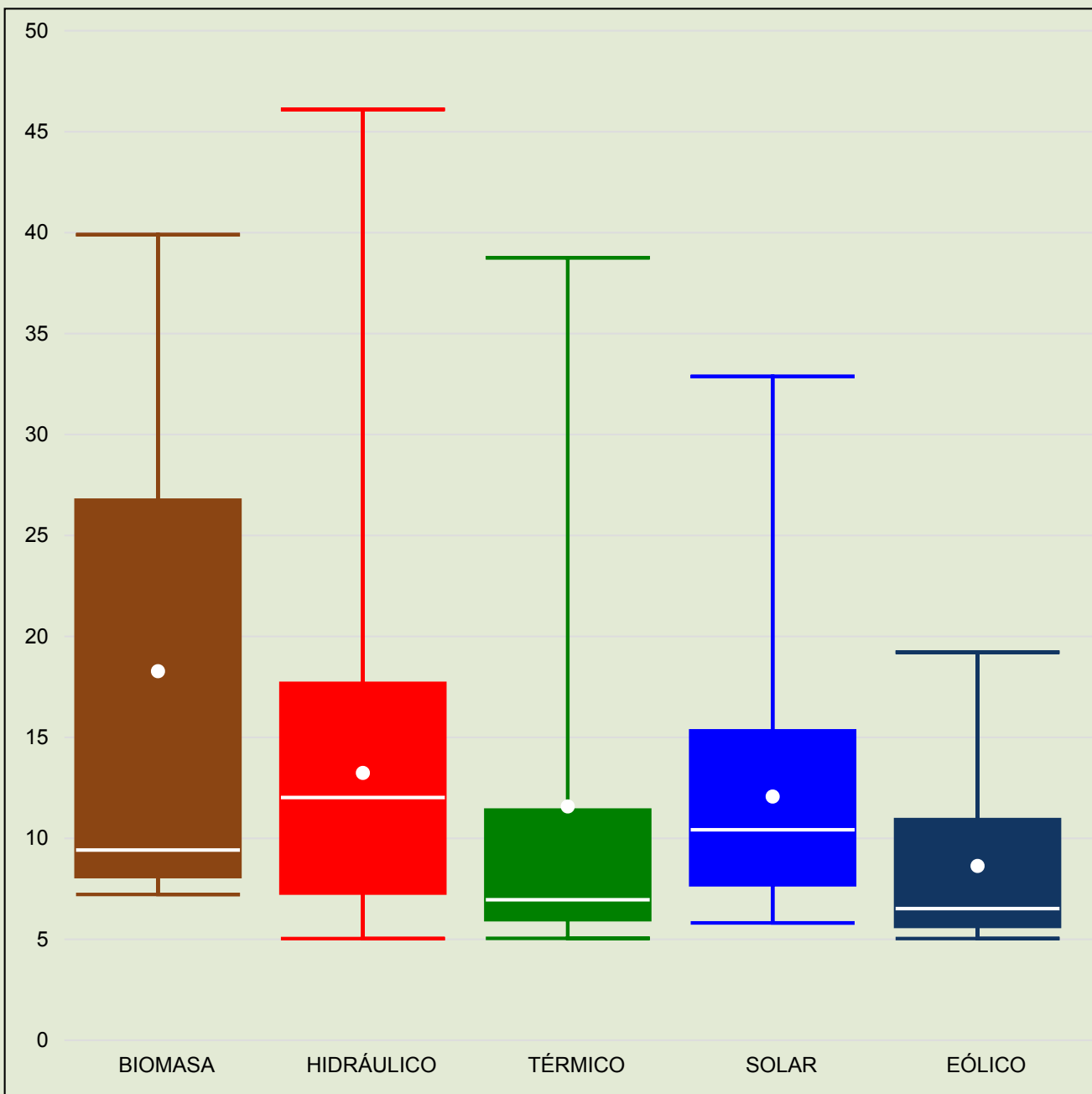


**Potencia de proyectos vigentes por promotor MW**


Costos índice de instalación por tecnología y por rango de potencia US\$/kW



Costos índice de generación (US\$/MWh)





**Contáctenos en :**  
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**[www.upme.gov.co](http://www.upme.gov.co)**