

OSSERVATORIO Sistemi di Accumulo

ELABORAZIONE ANIE
Giugno 2026



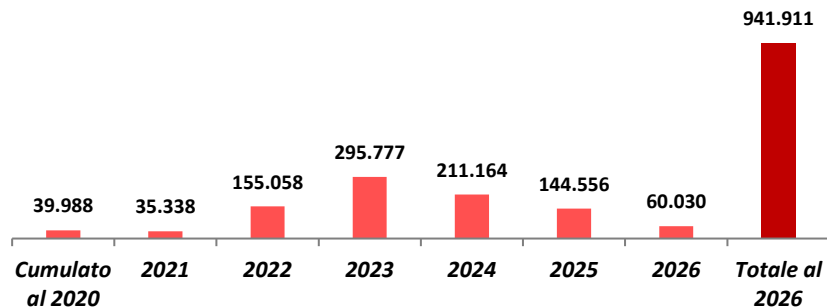
OSSERVATORIO Sistemi di Accumulo

Trend



SISTEMI DI ACCUMULO (SdA) IN ITALIA

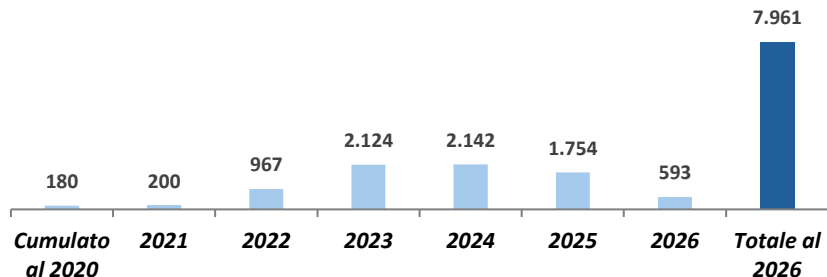
SdA connessi [N]



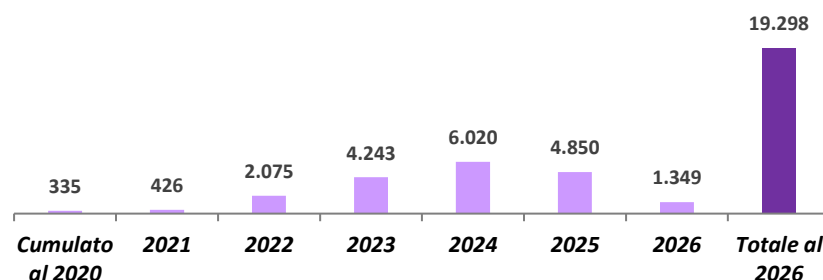
Variazioni tendenziali [%]

Periodo	N. SdA	Potenza SdA	Capacità SdA
Q1 2025/Q1 2024	-44%	-37%	-42%
Q2 2025/Q2 2024	-29%	40%	73%
Q3 2025/Q3 2024	-22%	-37%	-49%
Q4 2025/Q4 2024	-22%	-42%	-66%
Q1 2026/Q1 2025	-15%	10%	36%
Q2 2026/Q2 2025	-36%	-68%	-82%

Potenza SdA connessi [MW]

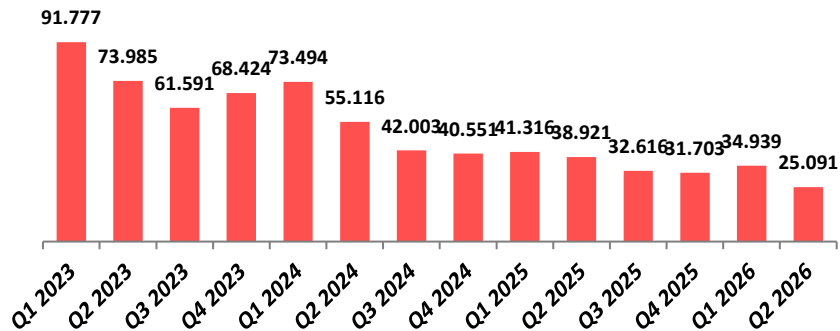


Capacità SdA connessi [MWh]



VARIAZIONI CONGIUNTURALI

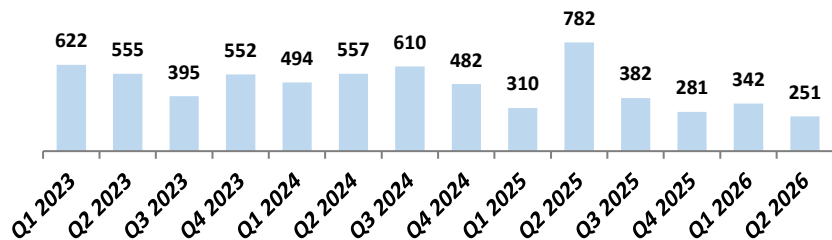
SdA connessi per trimestre [N]



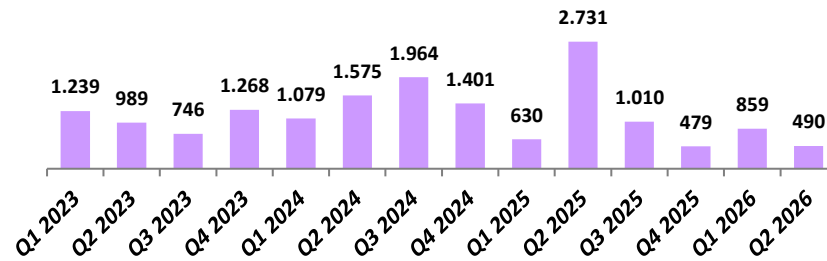
Variazioni congiunturali [%]

Periodo	N. SdA	Potenza SdA	Capacità SdA
Q3 2024/Q2 2024	-24%	10%	25%
Q4 2024/Q3 2024	-3%	-21%	-29%
Q1 2025/Q4 2024	2%	-36%	-55%
Q2 2025/Q1 2025	-6%	152%	333%
Q3 2025/Q2 2025	-16%	-51%	-63%
Q4 2025/Q3 2025	-3%	-26%	-53%
Q1 2026/Q4 2025	10%	21%	79%
Q2 2026/Q1 2026	-28%	-27%	-43%

Potenza SdA connessi per trimestre [MW]



Capacità SdA connessi per trimestre [MWh]



ABBINAMENTO SDA – Dati cumulati

Potenza [MW]

Potenza [MW]	2020	2021	2022	2023	2024	2025	2026
Fotovoltaico	171	365	1.311	3.221	4.500	5.512	5.981
Accumulo stand alone*			2	180	1.044	1.783	1.906
Eolico	2	2	2	2	2	4	4
Termoelettrico	7	13	33	68	68	68	68

Capacità [MWh]

	2020	2021	2022	2023	2024	2025	2026
Fotovoltaico	328	748	2.800	6.544	9.142	10.993	11.906
Accumulo stand alone*			3	477	3.898	6.892	7.328
Eolico	2	2	2	2	2	6	6
Termoelettrico	5	10	30	56	56	57	57

*accumulo stand-alone diverso da pompaggio esistente

Potenza [MW]

Potenza [MW]	YoY 2025/2024	Q2 2026/Q2 2025	Q1 2026/Q1 2025	Q4 2025/Q4 2024	Q3 2025/Q3 2024	YoY mobile
Fotovoltaico	-21%	-13%	-4%	7%	-12%	-6%
Accumulo stand alone*	-14%	-94%	89%	-98%	-56%	-75%
Termoelettrico	NA	NA	NA	NA	NA	NA
Eolico	> 1.000%	NA	NA	> 1.000%	NA	NA

Capacità [MWh]

Capacità [MWh]	YoY 2025/2024	Q2 2026/Q2 2025	Q1 2026/Q1 2025	Q4 2025/Q4 2024	Q3 2025/Q3 2024	YoY mobile
Fotovoltaico	-29%	-16%	4%	-5%	-17%	-9%
Accumulo stand alone*	-12%	-96%	152%	-99%	-59%	-78%
Termoelettrico	NA	NA	NA	NA	NA	NA
Eolico	> 1.000%	NA	NA	> 1.000%	NA	NA

*accumulo stand-alone diverso da pompaggio esistente
YoY Mobile: variazione calcolata sugli ultimi 12 mesi

ABBINAMENTO DEGLI ACCUMULI

Potenza [MW]	2020	2021	2022	2023	2024	2025	2026
Elettrochimico Distribuito FERNP	173	367	1.313	3.223	4.502	5.516	5.986
Elettrochimico Distribuito TERMOELETTRICO	7	13	33	68	68	68	68
Elettrochimico Distribuito Totale	180	380	1.346	3.292	4.570	5.585	6.055
Elettrochimico Centralizzato			2	180	1.044	1.783	1.906
Totale	180	380	1.347	3.471	5.614	7.368	7.961

Capacità [MWh]	2020	2021	2022	2023	2024	2025	2026
Elettrochimico Distribuito FERNP	330	750	2.802	6.546	9.144	11.000	11.913
Elettrochimico Distribuito TERMOELETTRICO	5	10	30	56	56	57	57
Elettrochimico Distribuito Totale	335	760	2.833	6.602	9.201	11.057	11.970
Elettrochimico Centralizzato			3	477	3.898	6.892	7.328
Totale	335	760	2.836	7.079	13.099	17.949	19.298

TARGET SCENARI 2030-40

2030 [GWh]			2035 [GWh]			2040 [GWh]		
Tipologia	PNIEC Policy	PNIEC Slow	DE-IT	GA-IT	PNIEC Slow	DE-IT	GA-IT	PNIEC Slow
Small Scale	14,0	13,3	16,2	15,6	15,1	19,1	18,2	17,5
Utility Scale	50,0	24,0	100,0	64,0	56,0	140,0	108,0	92,0
Capacity Market	7,5	7,5	7,5	7,5	7,5	7,5	7,5	7,5
Totale	71,5	44,7	123,7	87,0	78,6	166,5	133,6	117,0

OSSERVATORIO Sistemi di Accumulo

Totale Installato



INSTALLAZIONI PER SEGMENTI DI MERCATO

Numero SdA

Segmento di mercato	2025	Q1 2026	Q2 2026	Cumulato
Residential (≤ 20 kWh)	814.650	32.292	22.953	869.895
C&I (20 kWh $< x \leq 1$ MWh)	67.160	2.636	2.128	71.924
Utility Scale (1 MWh $< x \leq 10$ MWh)	37	8	8	53
Large utility scale (> 10 MWh)	34	3	2	39
Totale	881.881	34.939	25.091	941.911

Potenza [MW]

Segmento di mercato	2025	Q1 2026	Q2 2026	Cumulato
Residential (≤ 20 kWh)	4.566	188	142	4.895
C&I (20 kWh $< x \leq 1$ MWh)	897	55	51	1.003
Utility Scale (1 MWh $< x \leq 10$ MWh)	132	10	12	155
Large utility scale (> 10 MWh)	1.773	89	46	1.908
Totale	7.368	342	251	7.961

Capacità [MWh]

Segmento di mercato	2025	Q1 2026	Q2 2026	Cumulato
Residential (≤ 20 kWh)	8.884	346	248	9.478
C&I (20 kWh $< x \leq 1$ MWh)	2.008	114	97	2.218
Utility Scale (1 MWh $< x \leq 10$ MWh)	154	26	27	207
Large utility scale (> 10 MWh)	6.903	373	118	7.394
Totale	17.949	859	490	19.298

VARIAZIONI TENDENZIALI - SEGMENTO DI MERCATO



Gruppo Sistemi
di Accumulo

Numero SdA

Segmento di mercato	YoY 2025/2024	Q2 2026/Q2 2025	Q1 2026/Q1 2025	Q4 2025/Q4 2024	Q3 2025/Q3 2024	YoY mobile
Residential (≤ 20 kWh)	-31%	-37%	-17%	-22%	-23%	-25%
C&I (20 kWh<x ≤ 1 MWh)	-41%	-14%	15%	-15%	-14%	-7%
Utility Scale (1 MWh<x ≤ 10 MWh)	-29%	167%	300%	-40%	NA	110%
Large utility scale (>10 MWh)	-13%	-60%	0%	-71%	-40%	-50%
Totale	-32%	-36%	-15%	-22%	-22%	-24%

Potenza

Segmento di mercato	YoY 2025/2024	Q2 2026/Q2 2025	Q1 2026/Q1 2025	Q4 2025/Q4 2024	Q3 2025/Q3 2024	YoY mobile
Residential (≤ 20 kWh)	-26%	-32%	-14%	-6%	-19%	-18%
C&I (20 kWh<x ≤ 1 MWh)	-6%	14%	34%	19%	28%	24%
Utility Scale (1 MWh<x ≤ 10 MWh)	-73%	396%	466%	-24%	NA	125%
Large utility scale (>10 MWh)	-8%	-91%	86%	-86%	-56%	-72%
Totale	-18%	-68%	10%	-42%	-37%	-42%

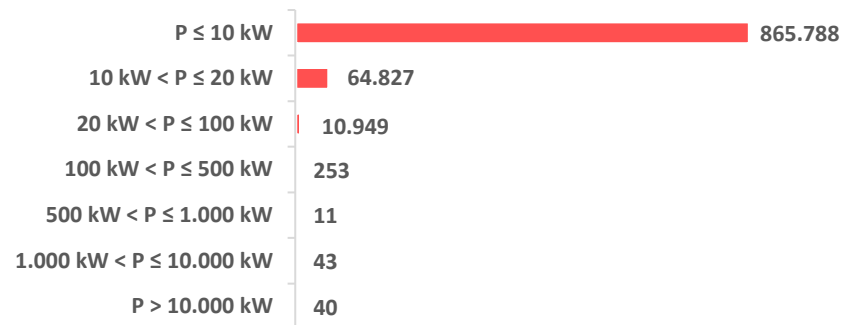
Capacità

Segmento di mercato	YoY 2025/2024	Q2 2026/Q2 2025	Q1 2026/Q1 2025	Q4 2025/Q4 2024	Q3 2025/Q3 2024	YoY mobile
Residential (≤ 20 kWh)	-33%	-36%	-14%	-21%	-23%	-23%
C&I (20 kWh<x ≤ 1 MWh)	-23%	4%	32%	5%	7%	12%
Utility Scale (1 MWh<x ≤ 10 MWh)	-58%	306%	634%	11%	NA	203%
Large utility scale (>10 MWh)	-10%	-95%	172%	-93%	-59%	-76%
Totale	-19%	-82%	36%	-66%	-49%	-58%

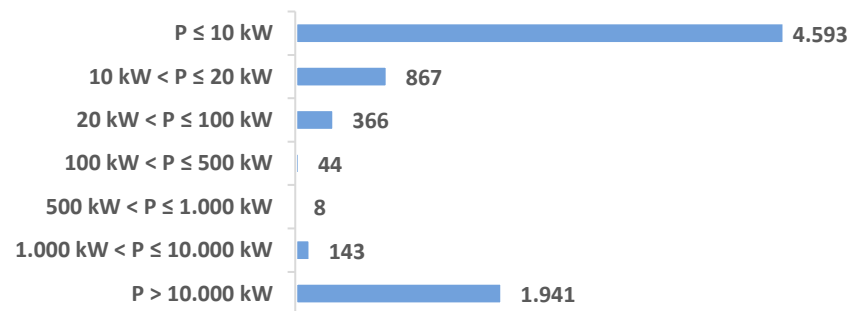
RANGE DI POTENZA SdA

Segmento	Numero [N]	Potenza [MW]	Capacità [MWh]
P ≤ 10 kW	865.788	4.593	9.836
10 kW < P ≤ 20 kW	64.827	867	1.303
20 kW < P ≤ 100 kW	10.949	366	530
100 kW < P ≤ 500 kW	253	44	73
500 kW < P ≤ 1.000 kW	11	8	13
1.000 kW < P ≤ 10.000 kW	43	143	198
P > 10.000 kW	40	1.941	7.345
Totale	941.911	7.961	19.298

Distribuzione N. SdA per range di potenza



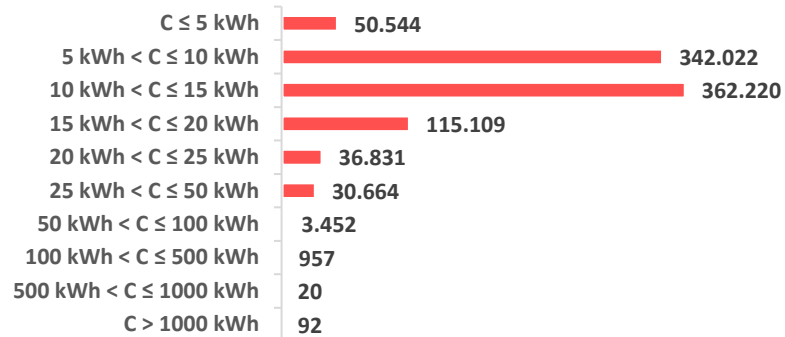
Distribuzione Potenza [MW] per range di potenza



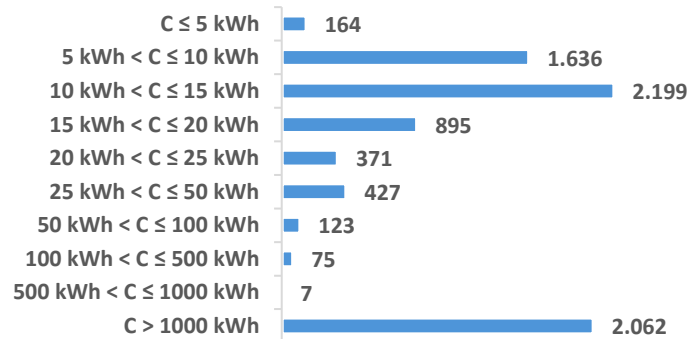
RANGE DI CAPACITÀ SDA

Categoria	Numero [N]	Potenza [MW]	Capacità [MWh]
C ≤ 5 kWh	50.544	164	226
5 kWh < C ≤ 10 kWh	342.022	1.636	2.843
10 kWh < C ≤ 15 kWh	362.220	2.199	4.438
15 kWh < C ≤ 20 kWh	115.109	895	1.972
20 kWh < C ≤ 25 kWh	36.831	371	813
25 kWh < C ≤ 50 kWh	30.664	427	1.001
50 kWh < C ≤ 100 kWh	3.452	123	241
100 kWh < C ≤ 500 kWh	957	75	150
500 kWh < C ≤ 1000 kWh	20	7	14
C > 1000 kWh	92	2.062	7.601
Totale	941.911	7.961	19.298

Distribuzione N. SdA per range di capacità



Distribuzione Potenza [MW] per range di capacità

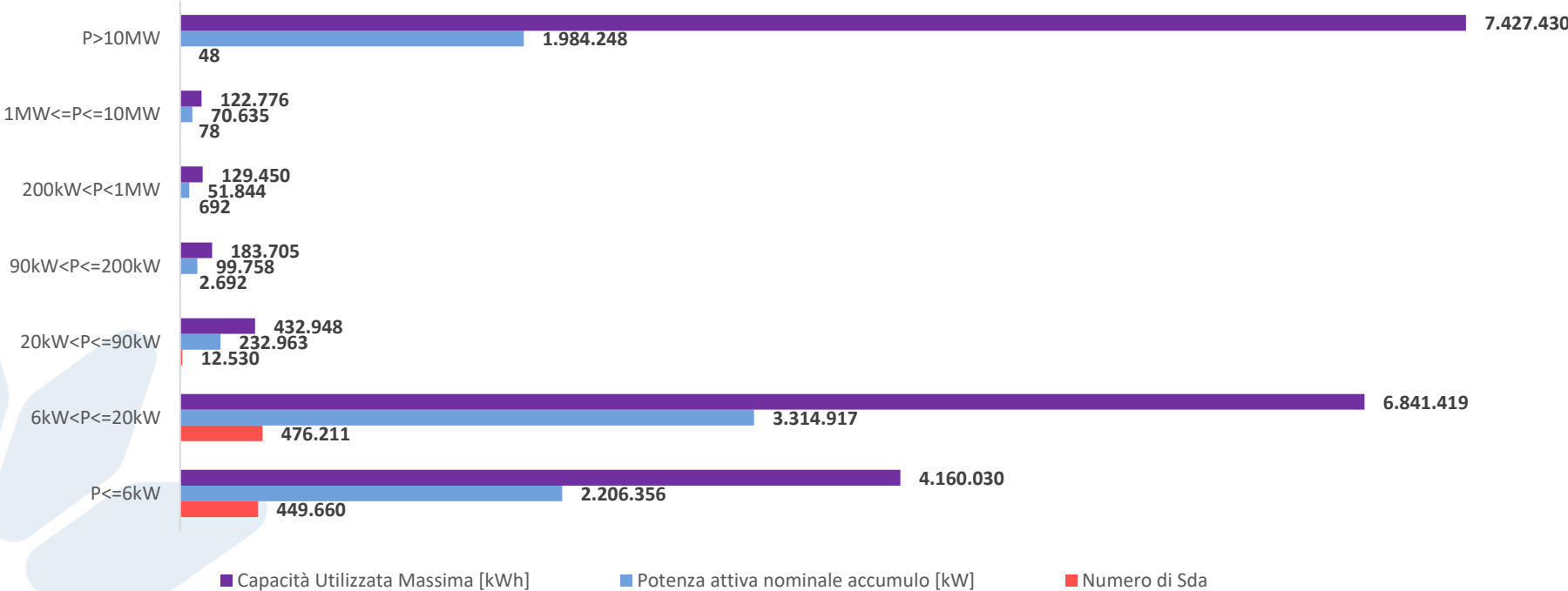


CLASSE DI POTENZA FV ABBINATO A SdA

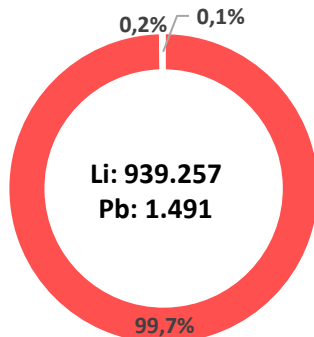


Gruppo Sistemi
di Accumulo

Numero SdA [N] , Potenza SdA [kW] e Capacità SdA[kWh] per taglia di impianto FV abbinato

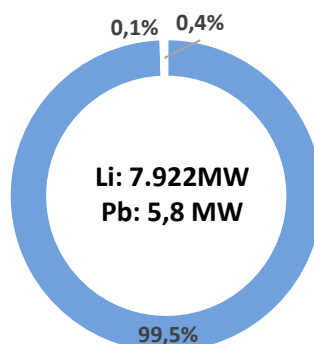


Distribuzione % N.SdA



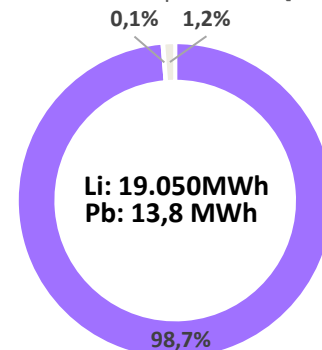
■ Litio ■ Piombo ■ Altro

Distribuzione % Potenza SdA [MW]



■ Litio ■ Piombo ■ Altro

Distribuzione % Capacità SdA [MWh]

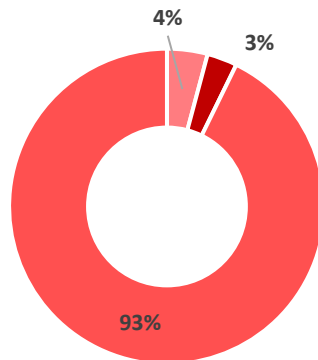


■ Litio ■ Piombo ■ Altro

Altre tecnologie	Numero [N]	Potenza [MW]	Capacità [MWh]
Supercondensatori	452	3,6	5,5
Batteria a volano	329	2,4	3,5
Batteria al Nichel-Cadmio	141	1,2	2,1
Batteria Z.E.B.R.A.	70	1,0	1,7
Idrogeno	58	0,5	0,8
Batteria Nichel-idruri	34	0,3	0,8
Batteria Zolfo-Sodio	27	0,3	0,4
Batteria Nichel-Zinco	22	0,1	32,2
Batteria Metallo-Aria	3	0,0	0,0
Batteria a flusso Poli-Solfuro-Bromuro	3	0,0	0,0
Batteria a flusso Vanadio Redox	1	0,0	0,0
Aria compressa	23	23,6	187,2

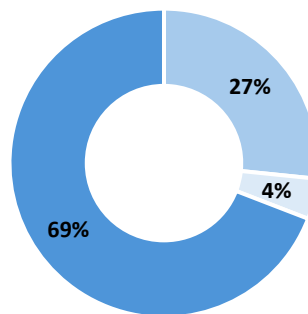
CONFIGURAZIONI SdA

Distribuzione % Numero SdA per configurazione



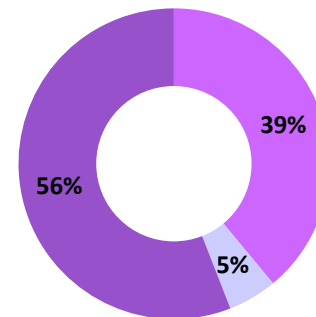
- Lato Post Produzione
- Lato Produzione AC
- Lato Produzione DC

Distribuzione % Potenza SdA per configurazione



- Lato Post Produzione
- Lato Produzione AC
- Lato Produzione DC

Distribuzione % Capacità SdA per configurazione

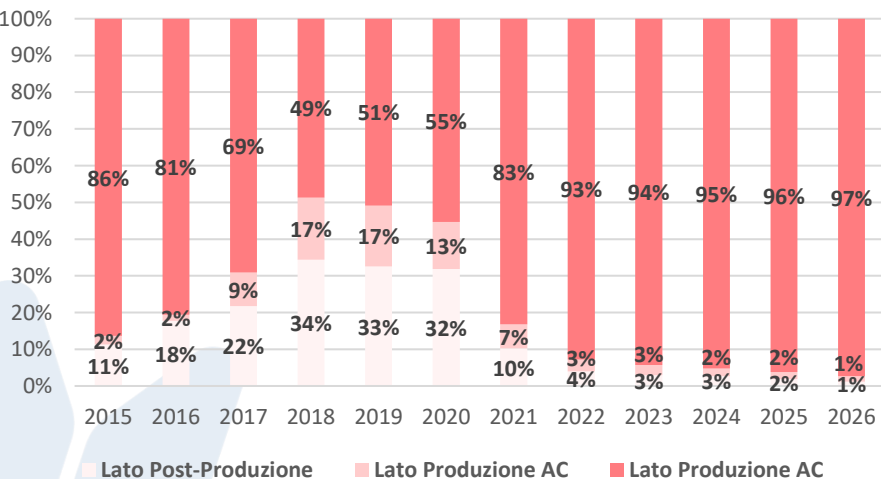


- Lato Post Produzione
- Lato Produzione AC
- Lato Produzione DC

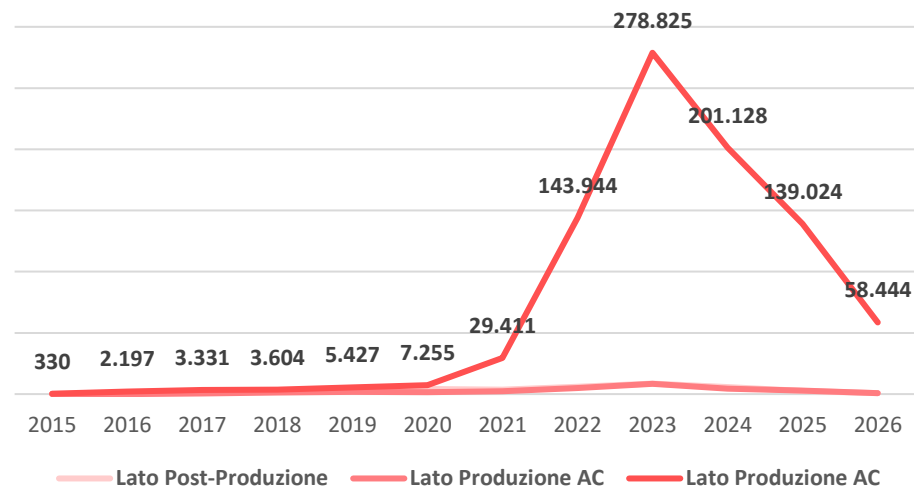
Categoria	SdA [N]	Potenza SdA [MW]	Capacità SdA [MWh]
Lato Post Produzione	39.156	2.119	7.524
Lato Produzione AC	29.065	338	982
Lato Produzione DC	873.690	5.504	10.792

CONFIGURAZIONI SdA

Distribuzione % Numero SdA installati per configurazione



SdA connessi per configurazione [N]



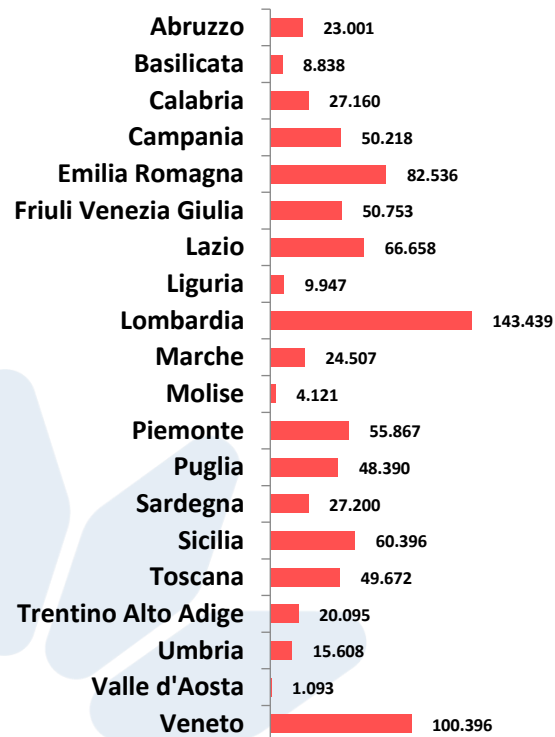
OSSERVATORIO Sistemi di Accumulo

Le Regioni

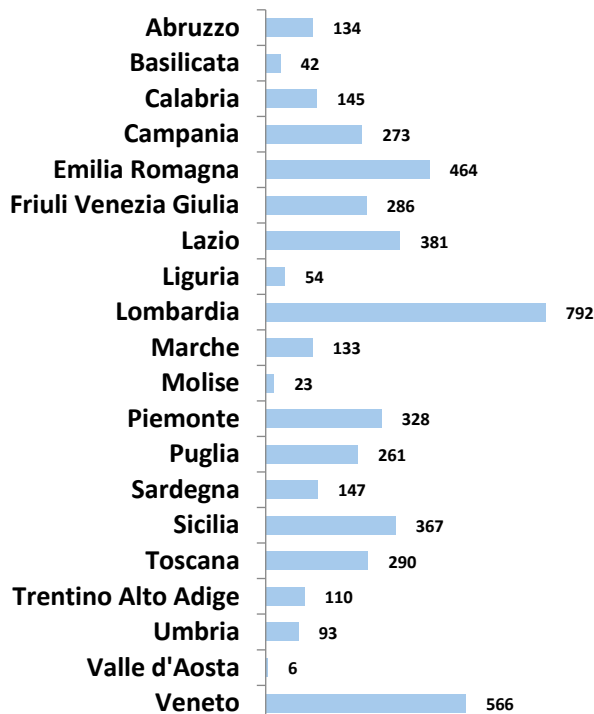


Regioni - SdA Residential (≤ 20 kWh)

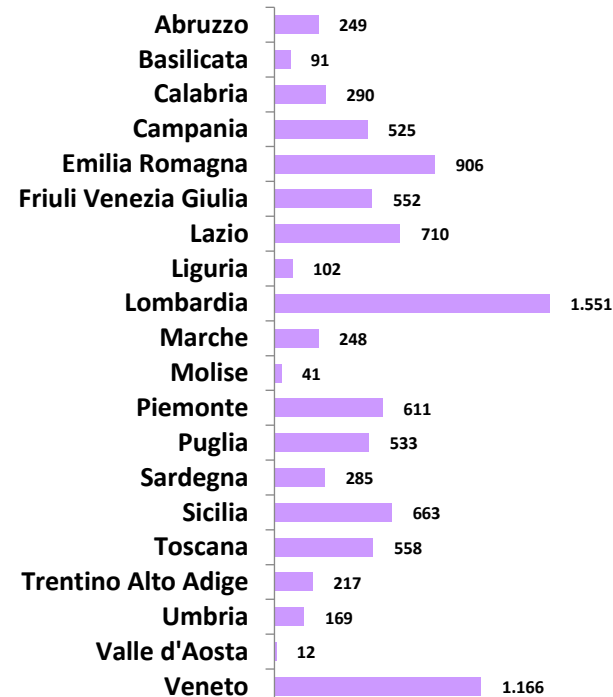
SdA installati [N]



Potenza SdA [MW]

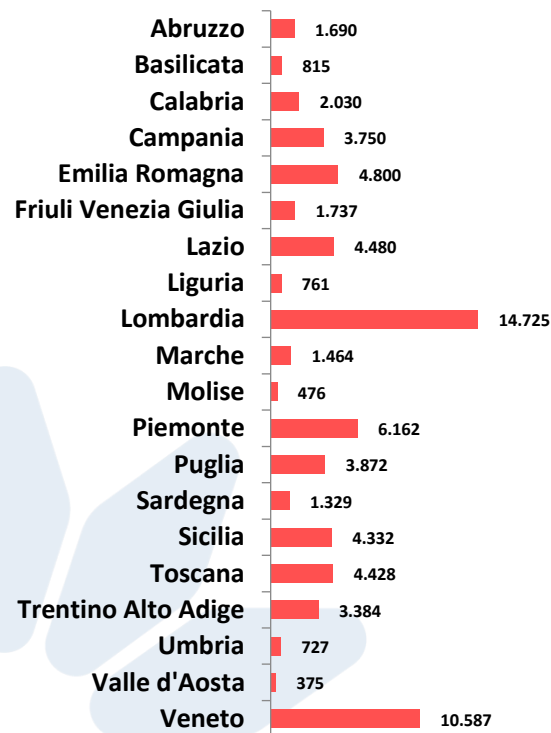


Capacità SdA [MWh]

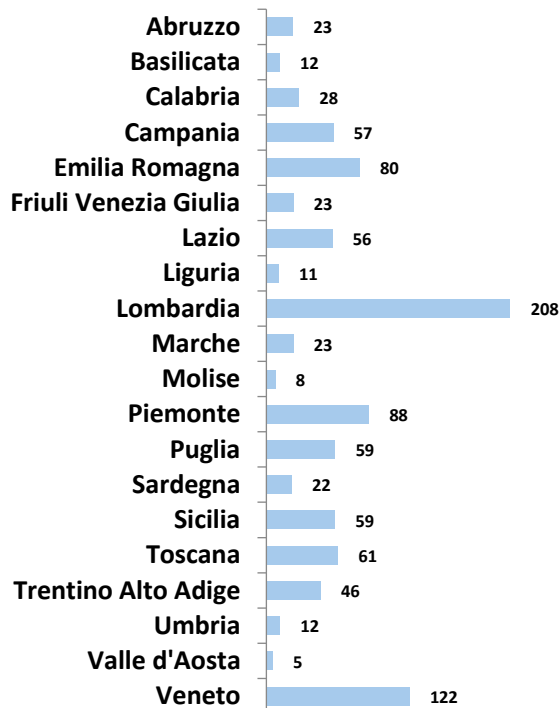


Regioni - SdA C&I (20 kWh<x≤1 MWh)

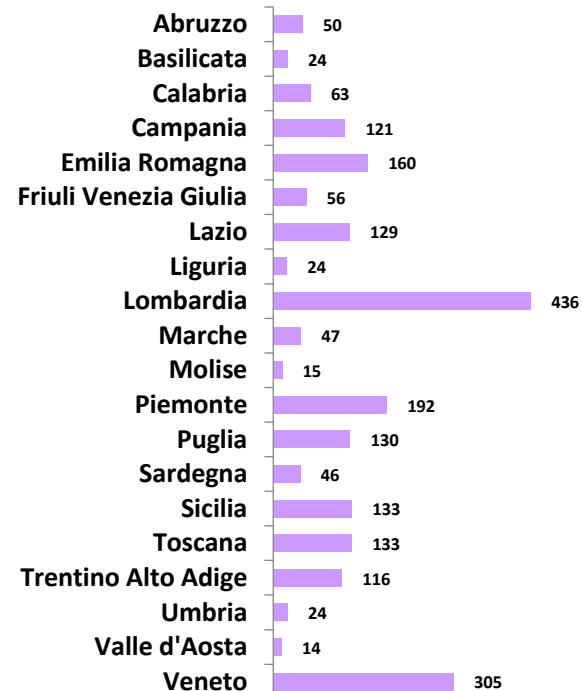
SdA installati [N]



Potenza SdA [MW]

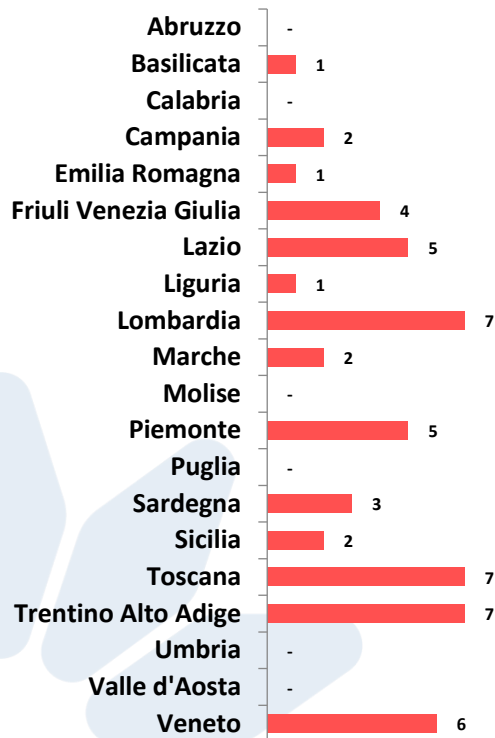


Capacità SdA [MWh]

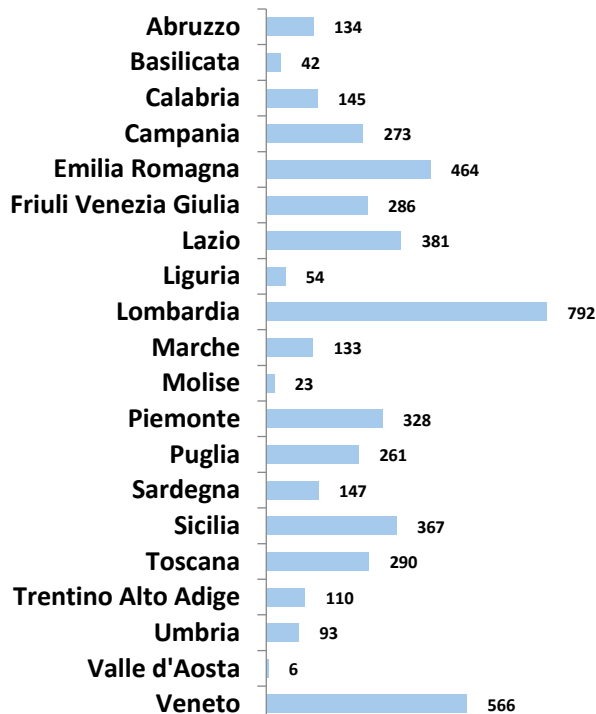


Regioni - SdA Utility Scale (1 MWh<x≤10 MWh)

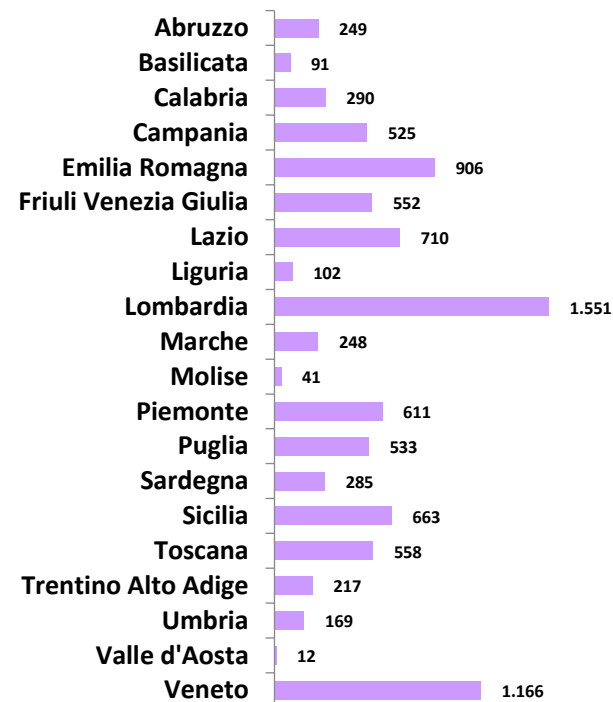
SdA installati [N]



Potenza SdA [MW]

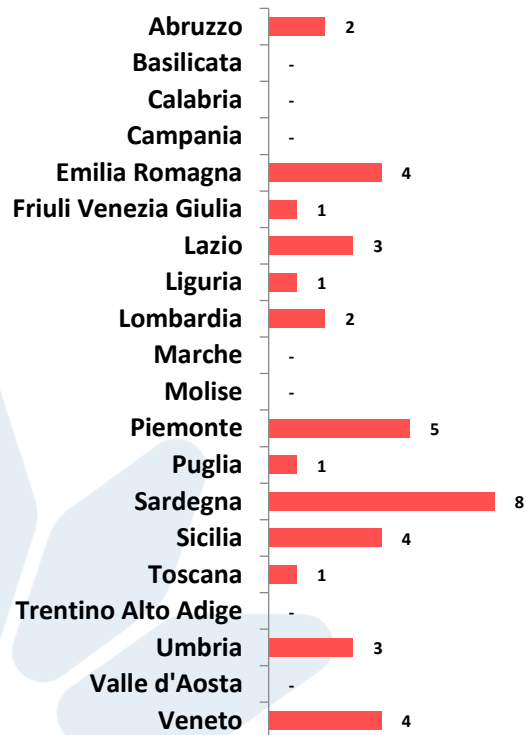


Capacità SdA [MWh]

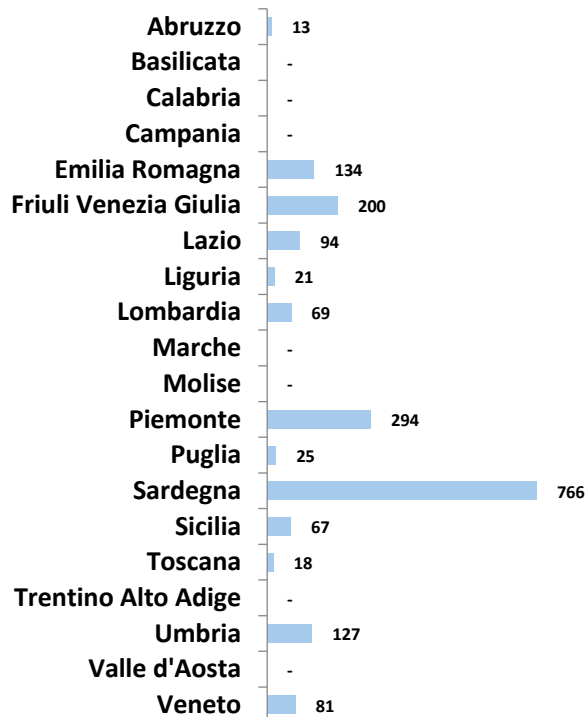


Regioni - SdA Large Utility Scale (>10 MWh)

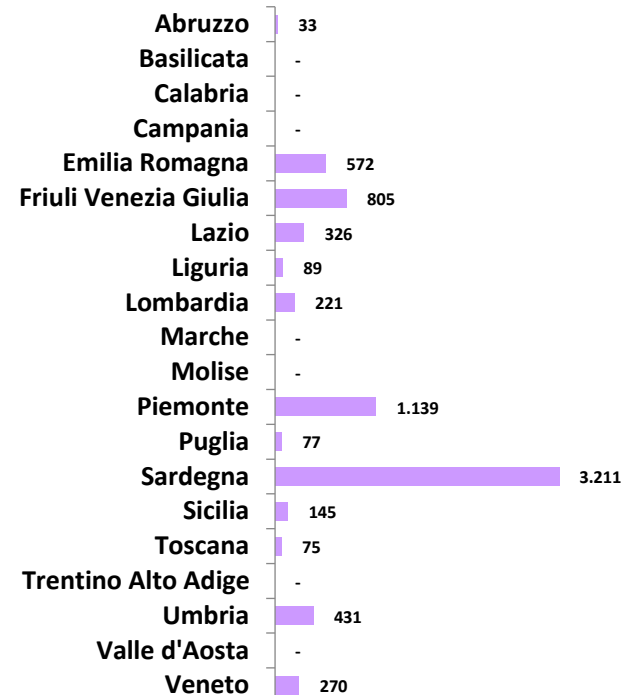
SdA installati [N]



Potenza SdA [MW]

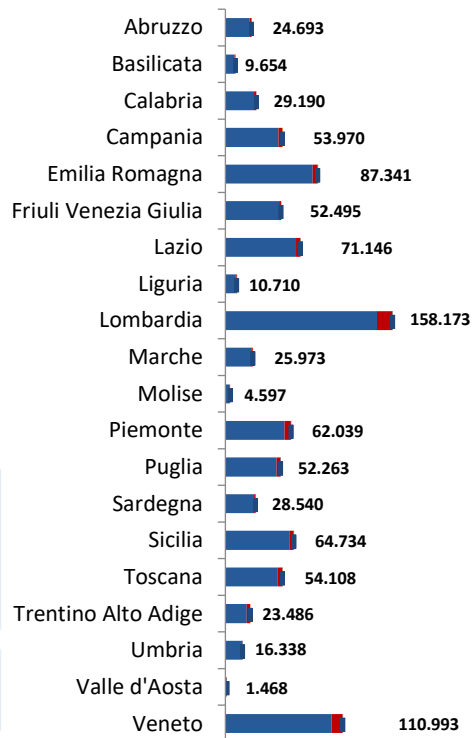


Capacità SdA [MWh]

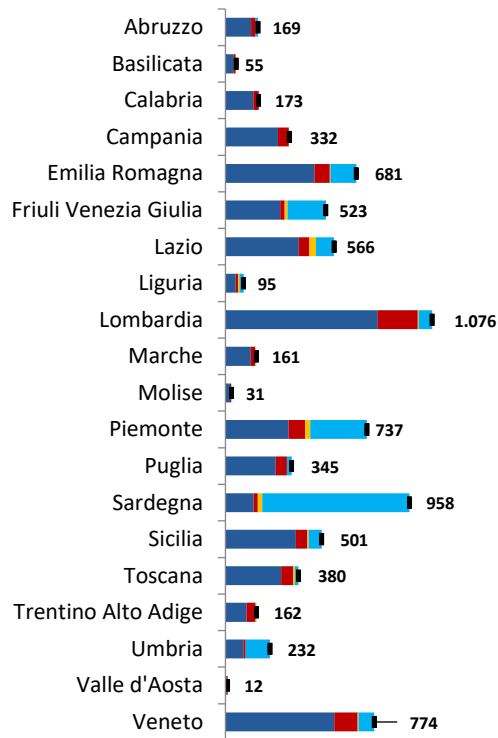


Regioni - SdA per segmento di mercato

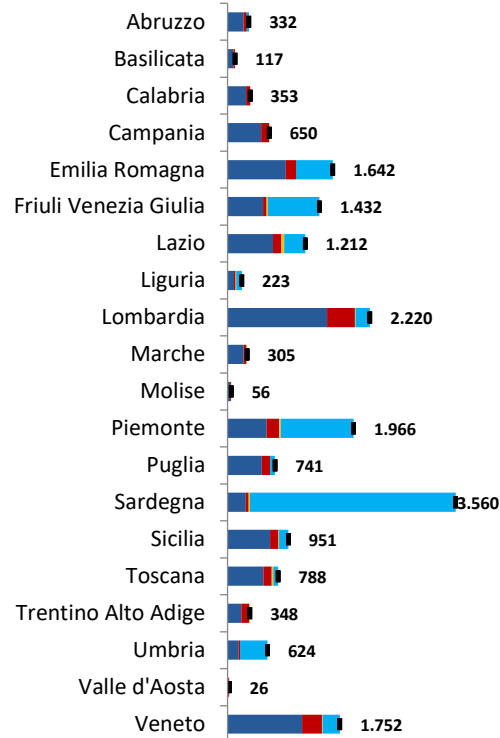
SdA installati [N]



Potenza SdA [MW]

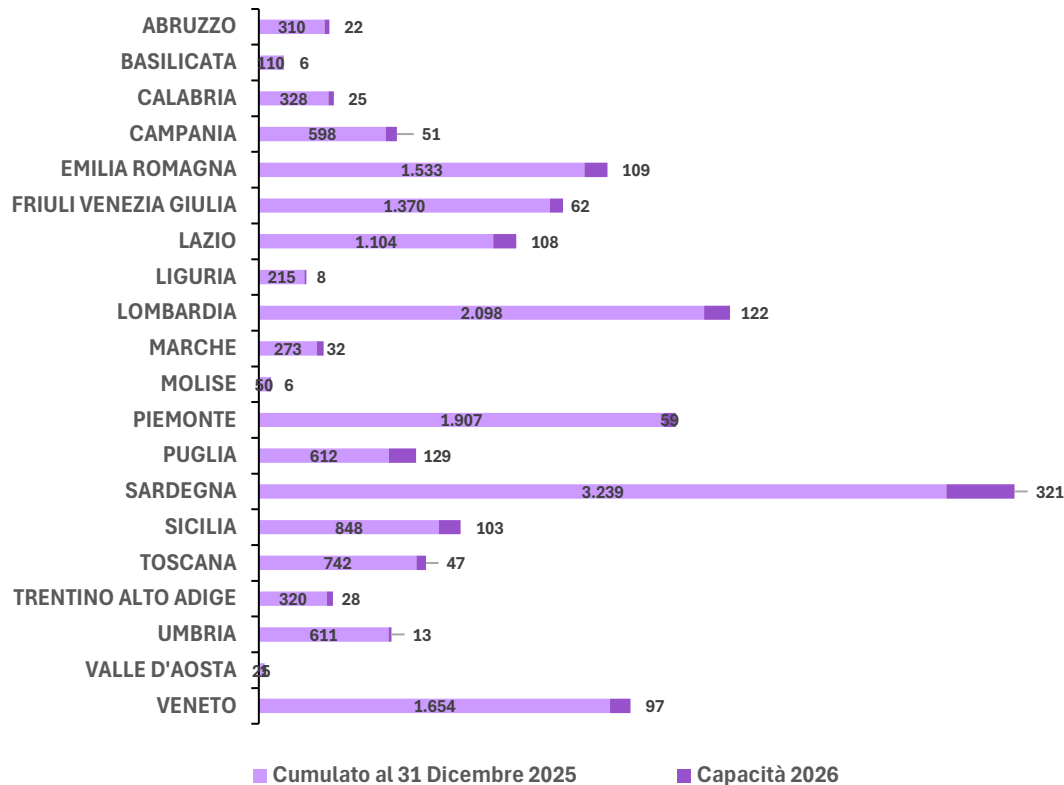


Capacità SdA [MWh]



Regioni: SdA Cumulato 2025 + Q1 e Q2 2026

Capacità SdA totale per regione [MWh]

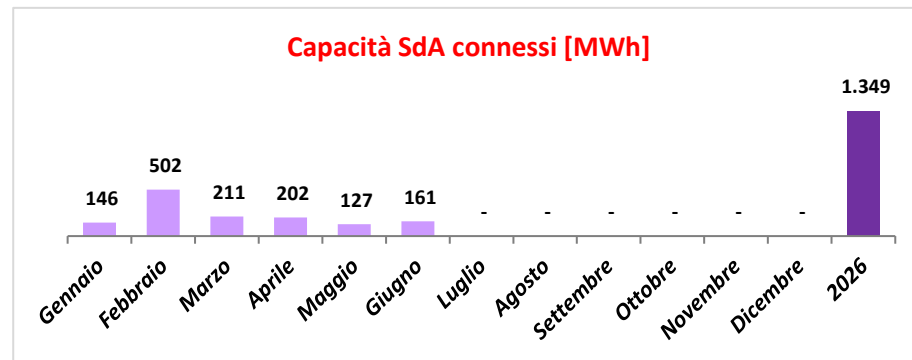
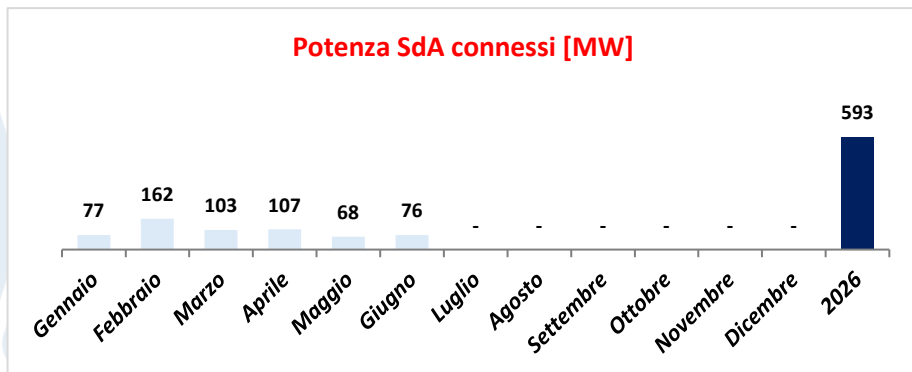
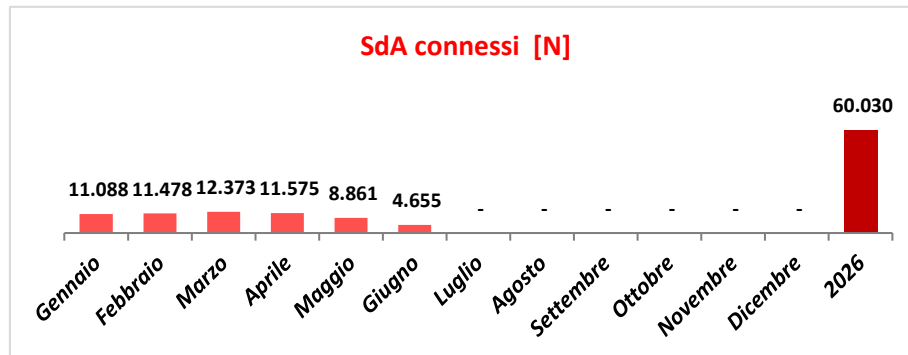


OSSERVATORIO Sistemi di Accumulo

Installato nel Q1 e nel Q2 2026

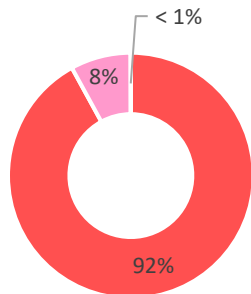


Sistemi di Accumulo – giugno 2026*



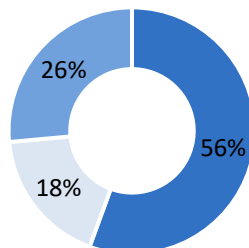
RANGE DI CAPACITÀ SDA – 2026*

Numero [N]



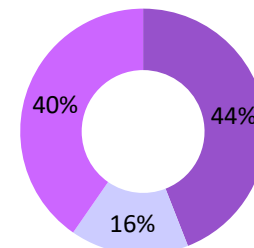
- $C \leq 20 \text{ kWh}$
- $20 \text{ kWh} < C \leq 1000 \text{ kWh}$
- $C > 1000 \text{ kWh}$

Potenza [MW]



- $C \leq 20 \text{ kWh}$
- $20 \text{ kWh} < C \leq 1000 \text{ kWh}$
- $C > 1000 \text{ kWh}$

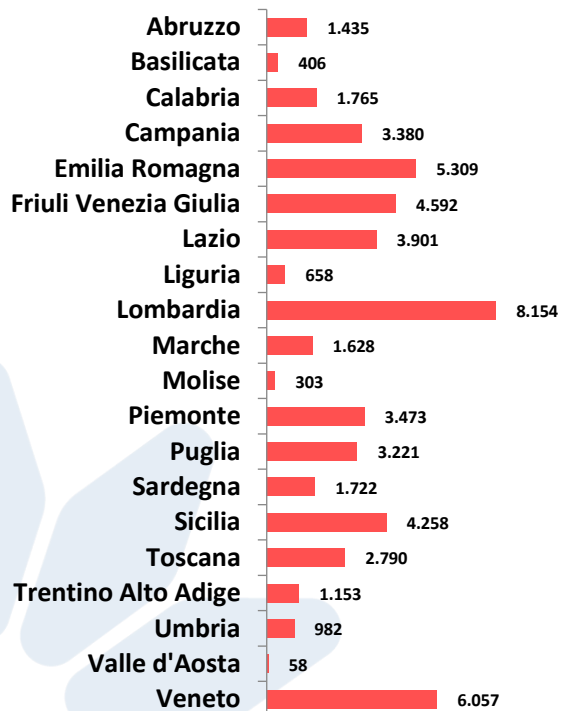
Capacità [MWh]



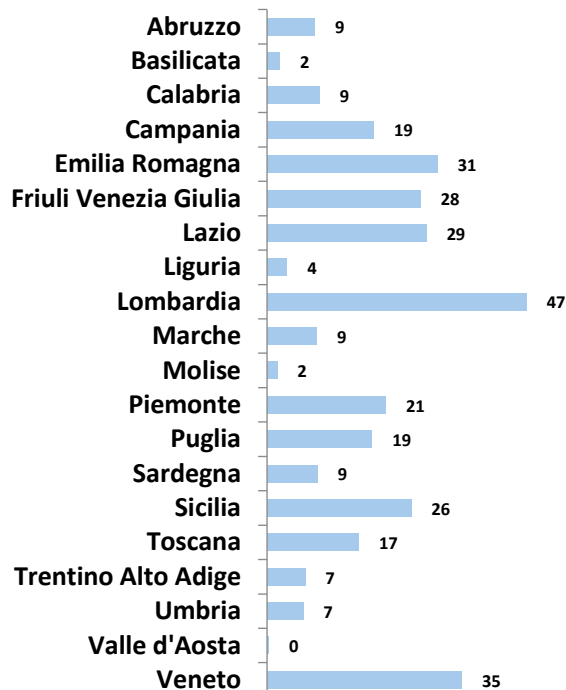
- $C \leq 20 \text{ kWh}$
- $20 \text{ kWh} < C \leq 1000 \text{ kWh}$
- $C > 1000 \text{ kWh}$

Regioni - SdA Residential (≤ 20 kWh)

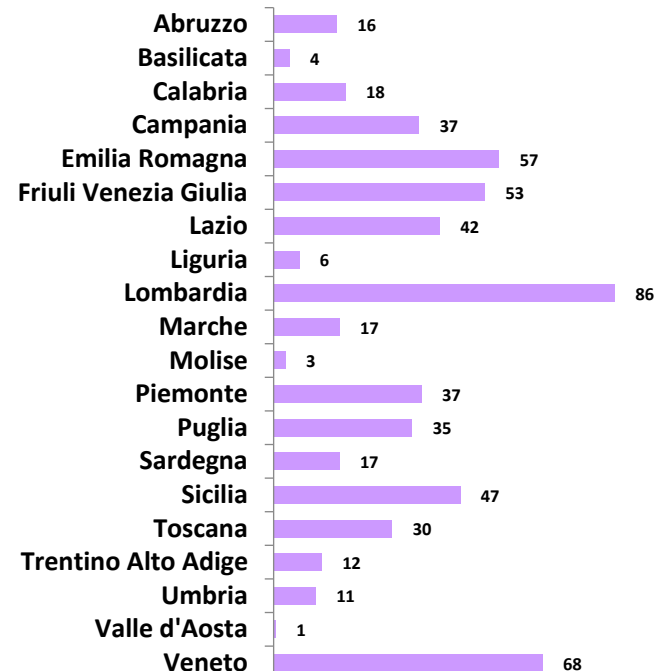
SdA installati [N]



Potenza SdA [MW]

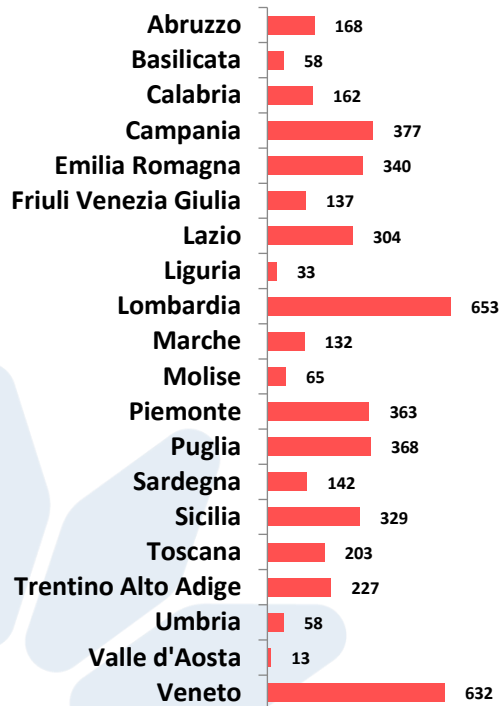


Capacità SdA [MWh]

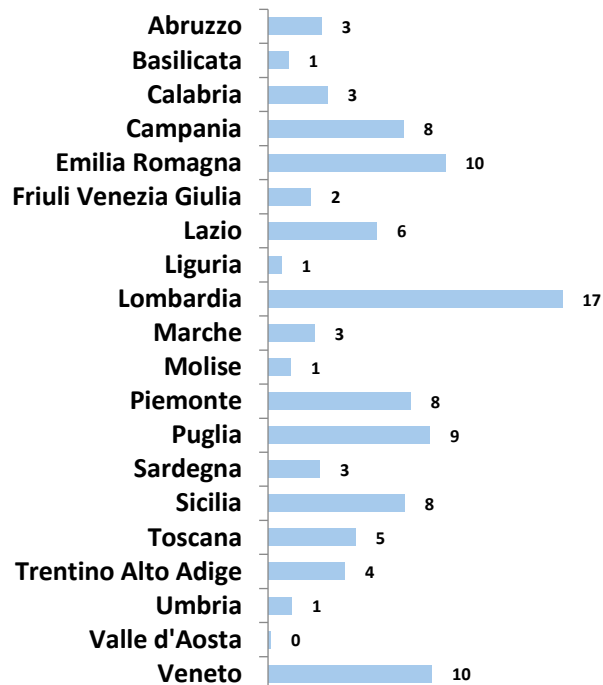


Regioni - SdA C&I (20 kWh<x≤1 MWh)

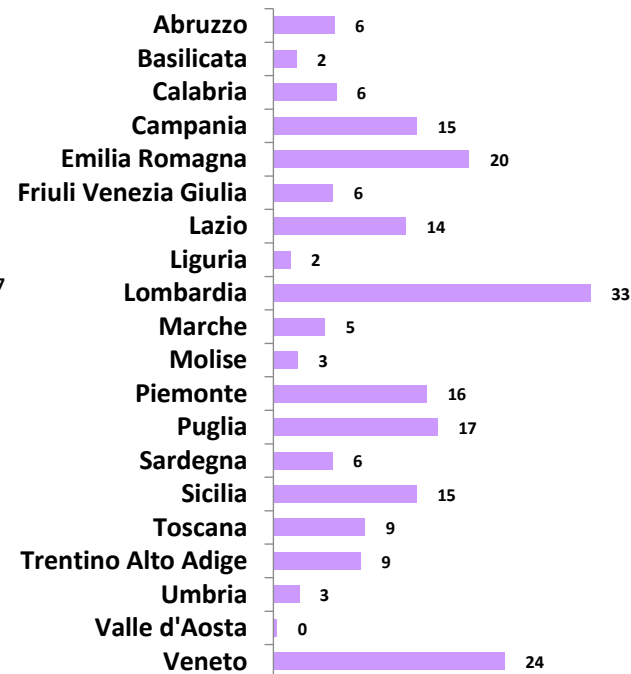
SdA installati [N]



Potenza SdA [MW]

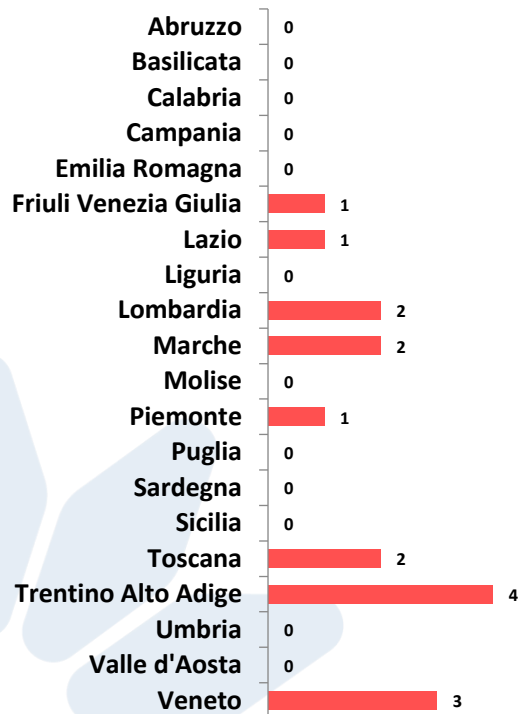


Capacità SdA [MWh]

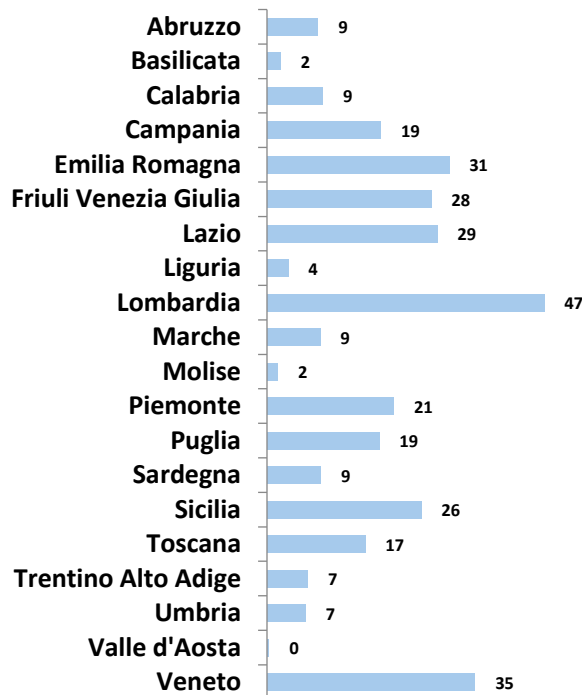


Regioni - SdA Utility Scale (1 MWh<x≤10 MWh)

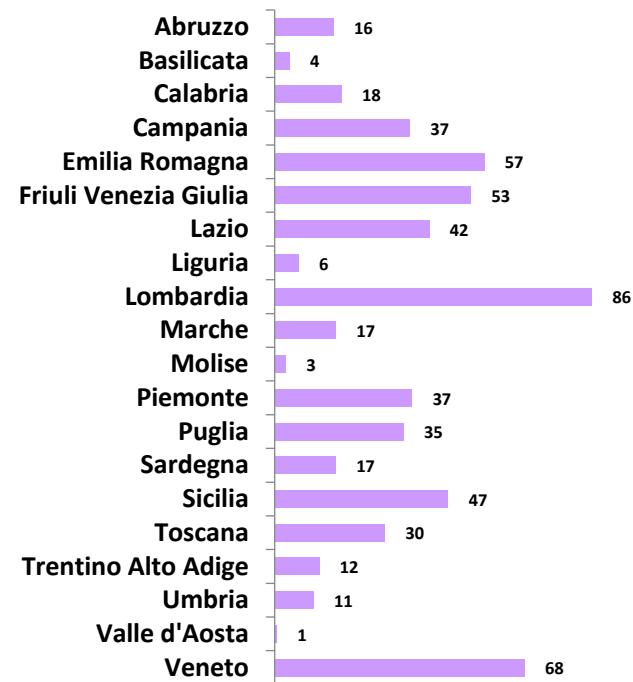
SdA installati [N]



Potenza SdA [MW]

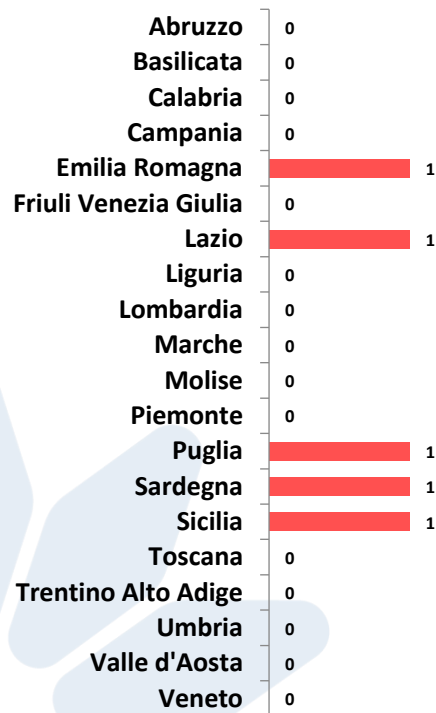


Capacità SdA [MWh]

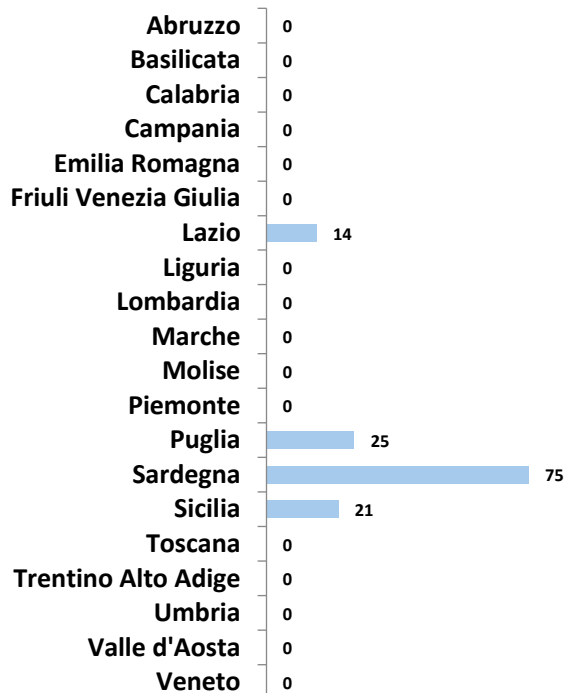


Regioni - SdA Large Utility Scale (>10 MWh)

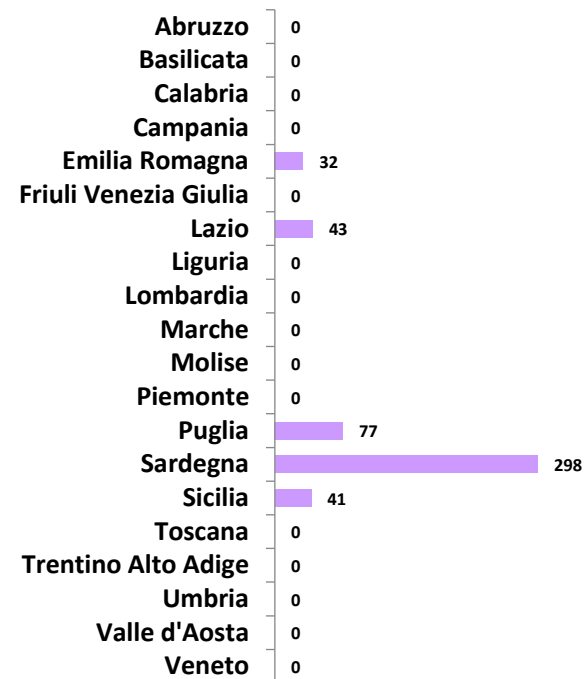
SdA installati [N]



Potenza SdA [MW]

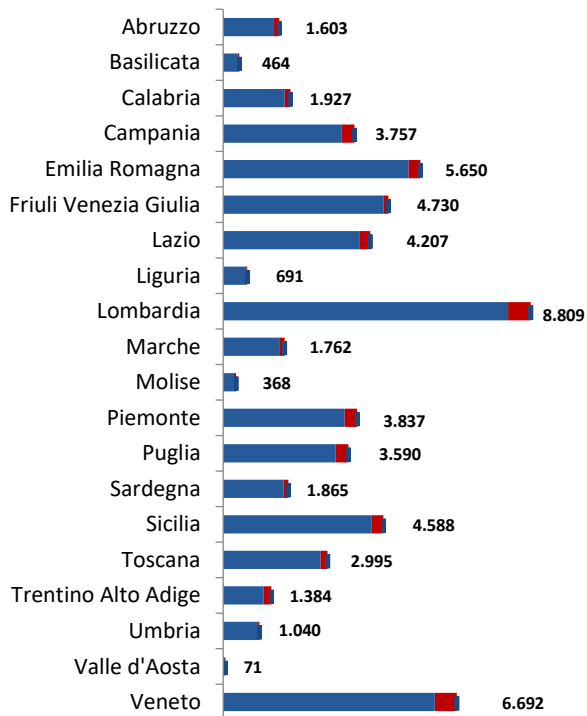


Capacità SdA [MWh]

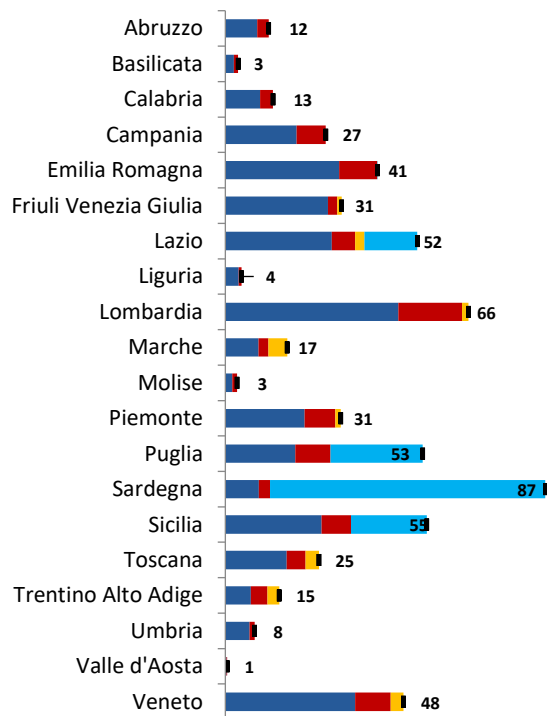


Regioni - SdA Q1 + Q2 2026 – segmenti di mercato

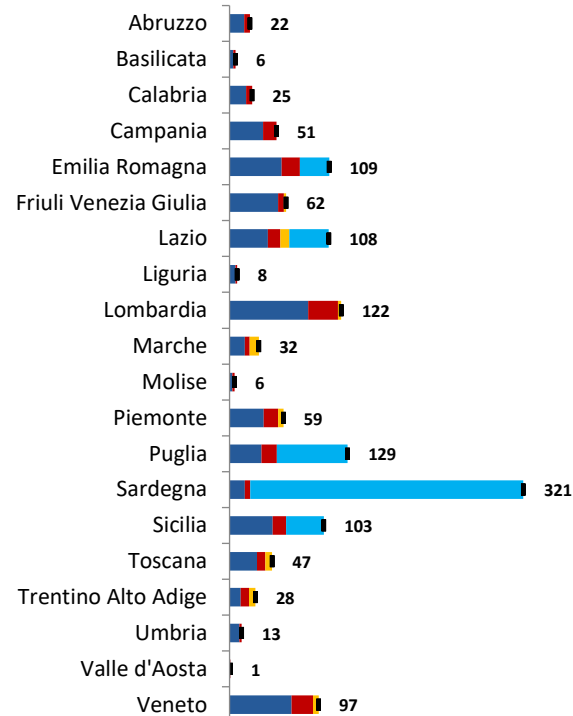
SdA installati [N]



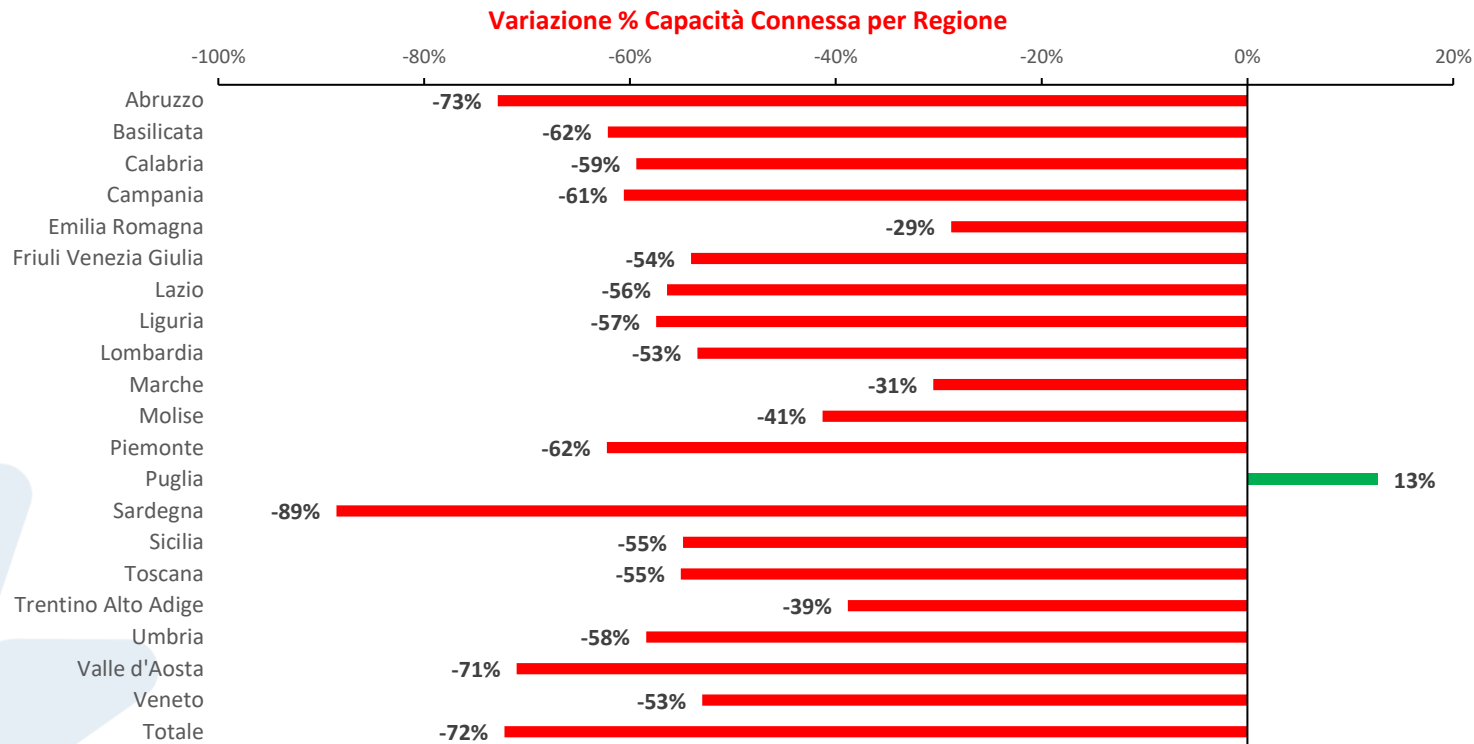
Potenza SdA [MW]



Capacità SdA [MWh]



Regioni – Variazioni Capacità primo semestre 2026 vs 2025



Regioni – Variazioni Potenza primo semestre 2026 vs 2025



Gruppo Sistemi
di Accumulo

