



Electrical Distribution Planning

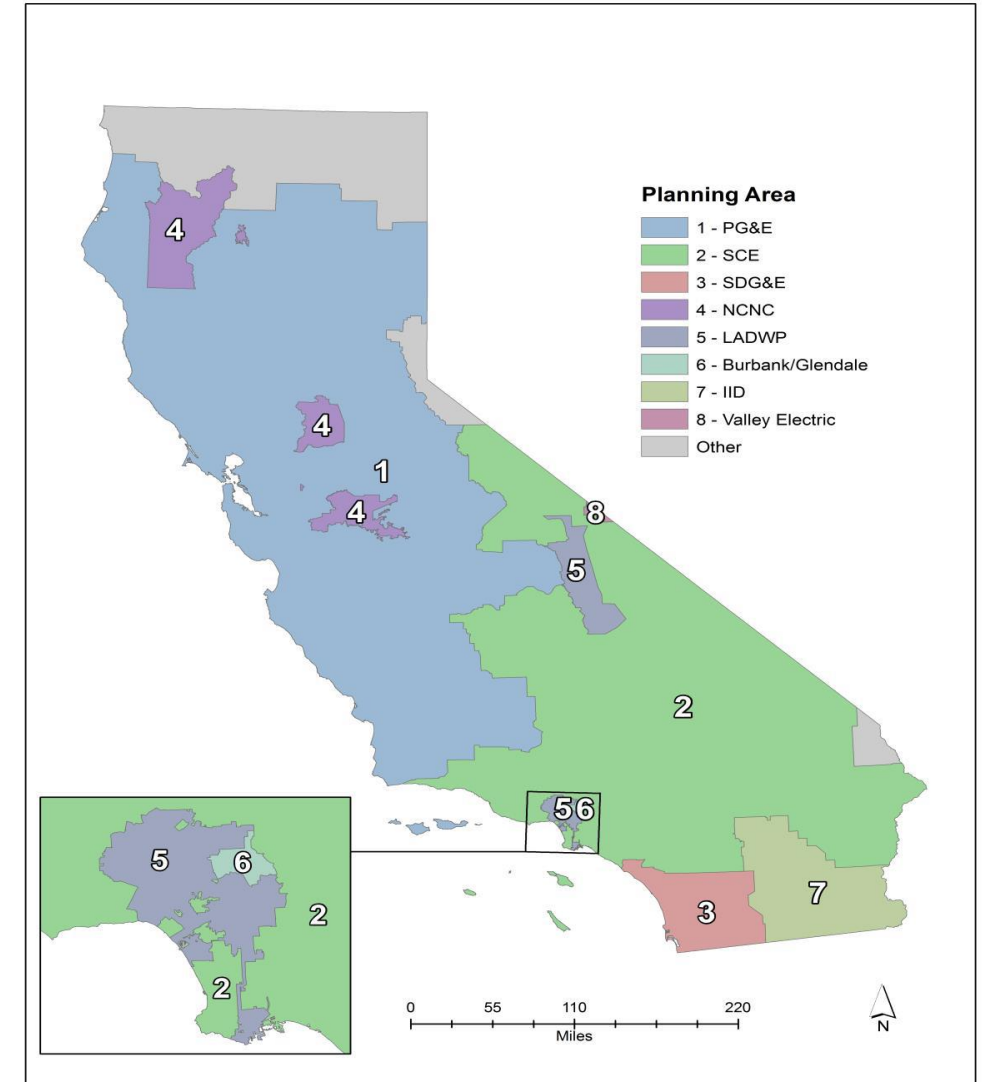
Informational Hearing

May 24, 2023



CA Electricity Demand Forecast

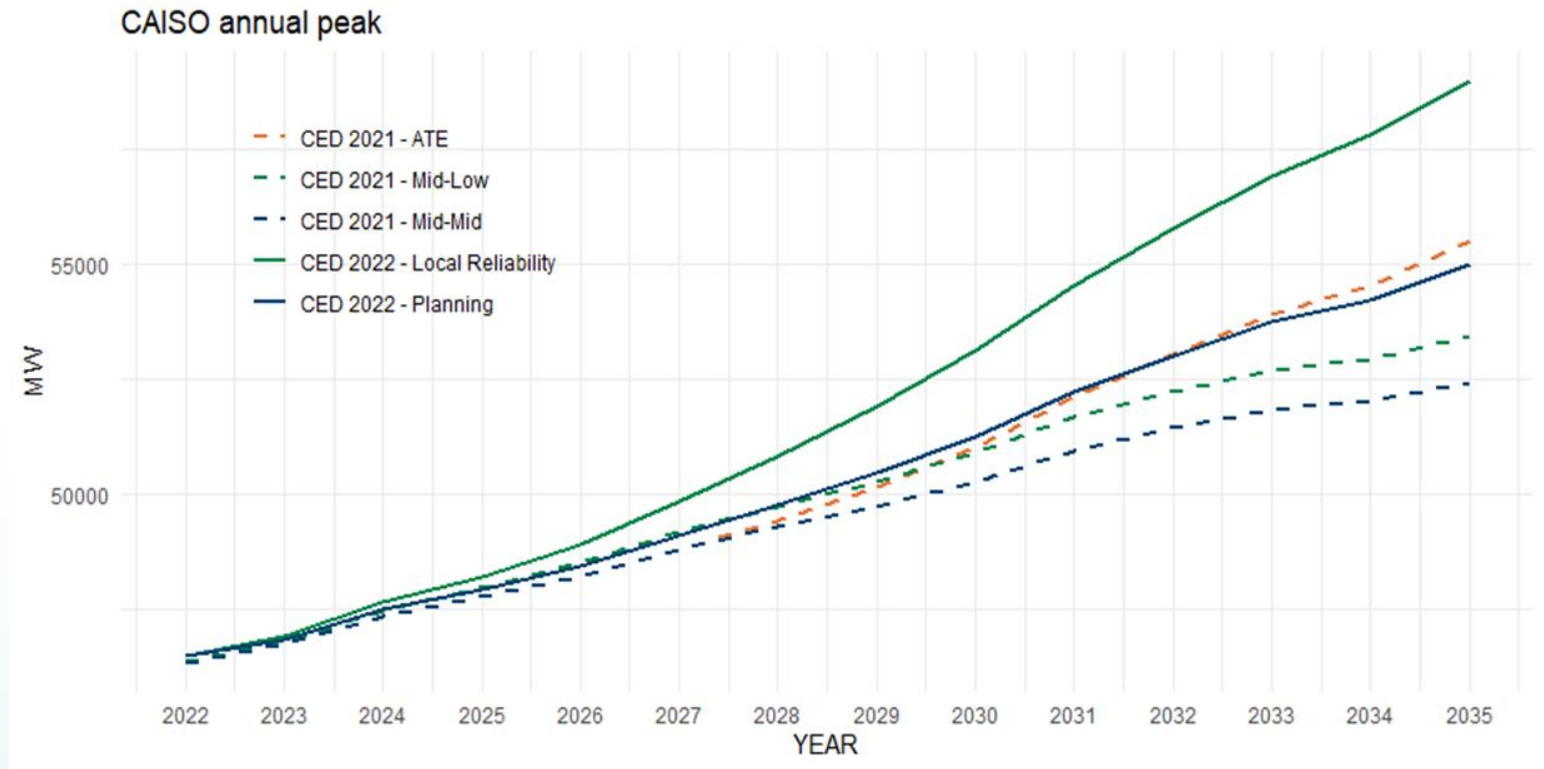
- Foundational to procurement and system planning
- 15+ year forecast
- Hourly electricity loads by Planning Area
- Scenarios capture uncertainty with decarbonization policies
- Informs distribution planning
 - IOUs choose the combination of distributed energy resource scenarios and take that to CPUC for approval
 - IOUs make decisions about load growth and distributed energy resource allocations on specific circuits





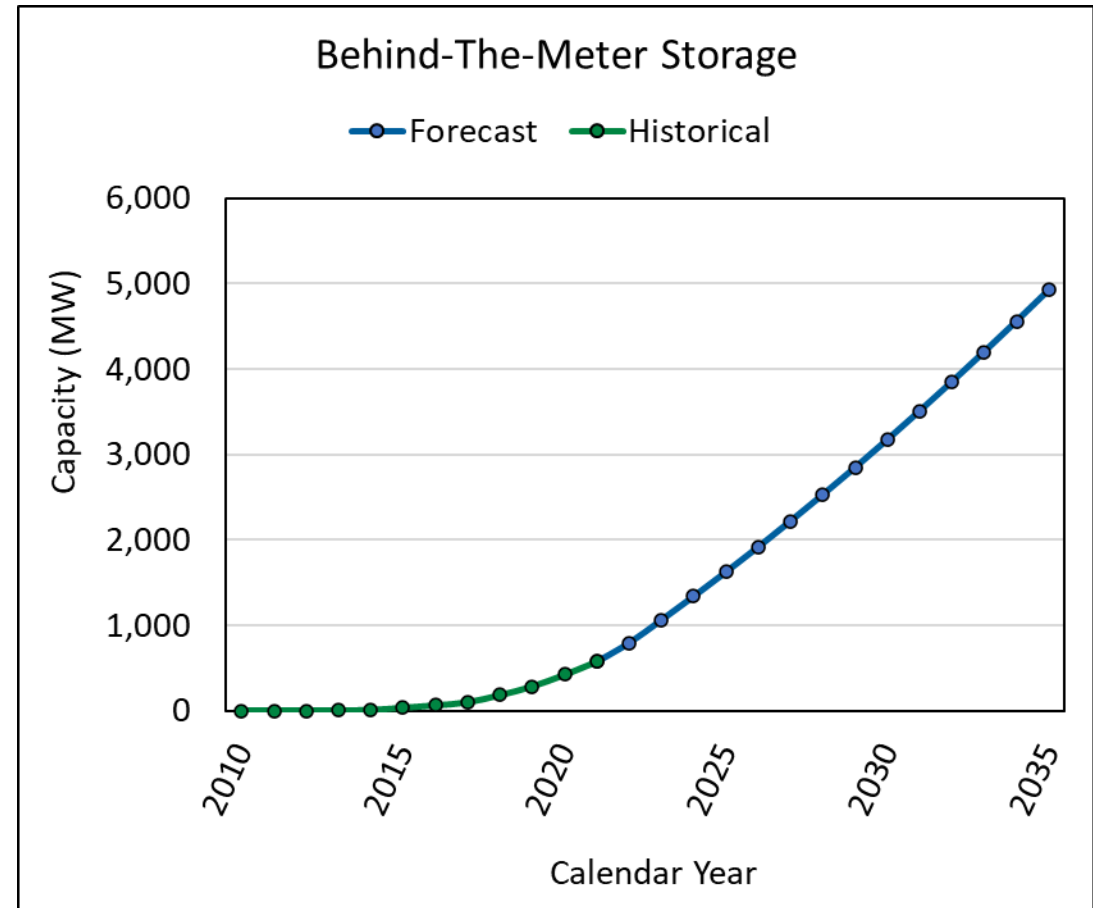
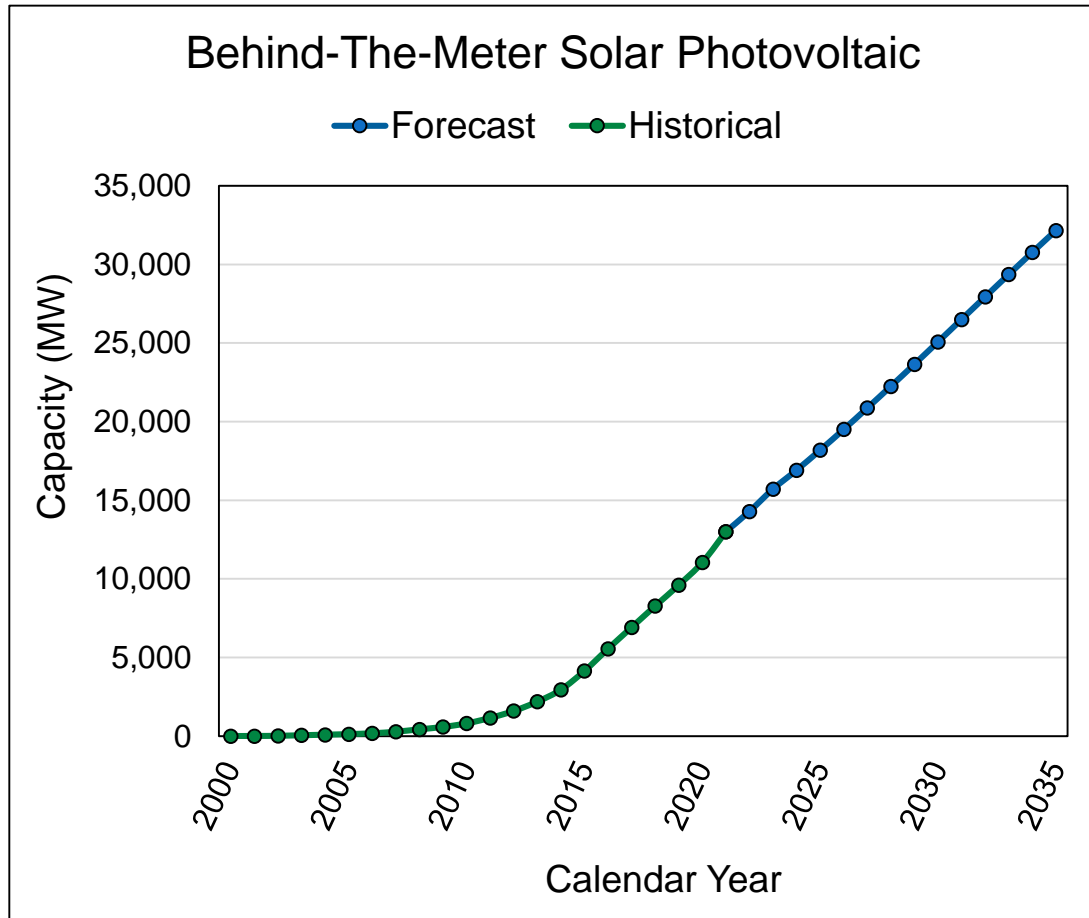
Demand Forecast Scenarios

- 2022 IEPR forecast includes:
 - Baseline
 - 6 scenarios for energy efficiency
 - 5 scenarios for building electrification
 - 2 scenarios for transportation electrification
- IOUs requested approval from CPUC to use the Local Reliability Scenario for the 2024/25 GNA/DDOR





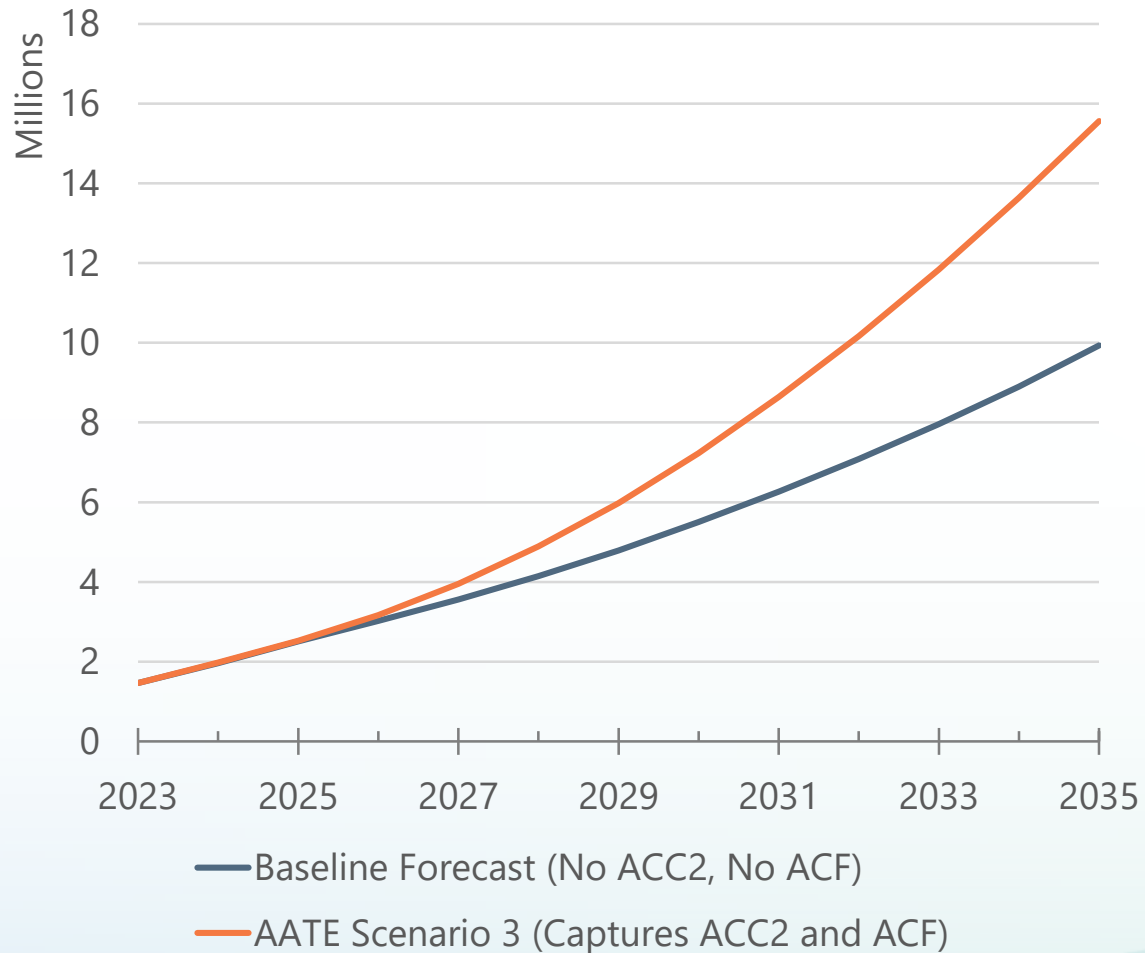
Behind-the-Meter PV and Storage Projections



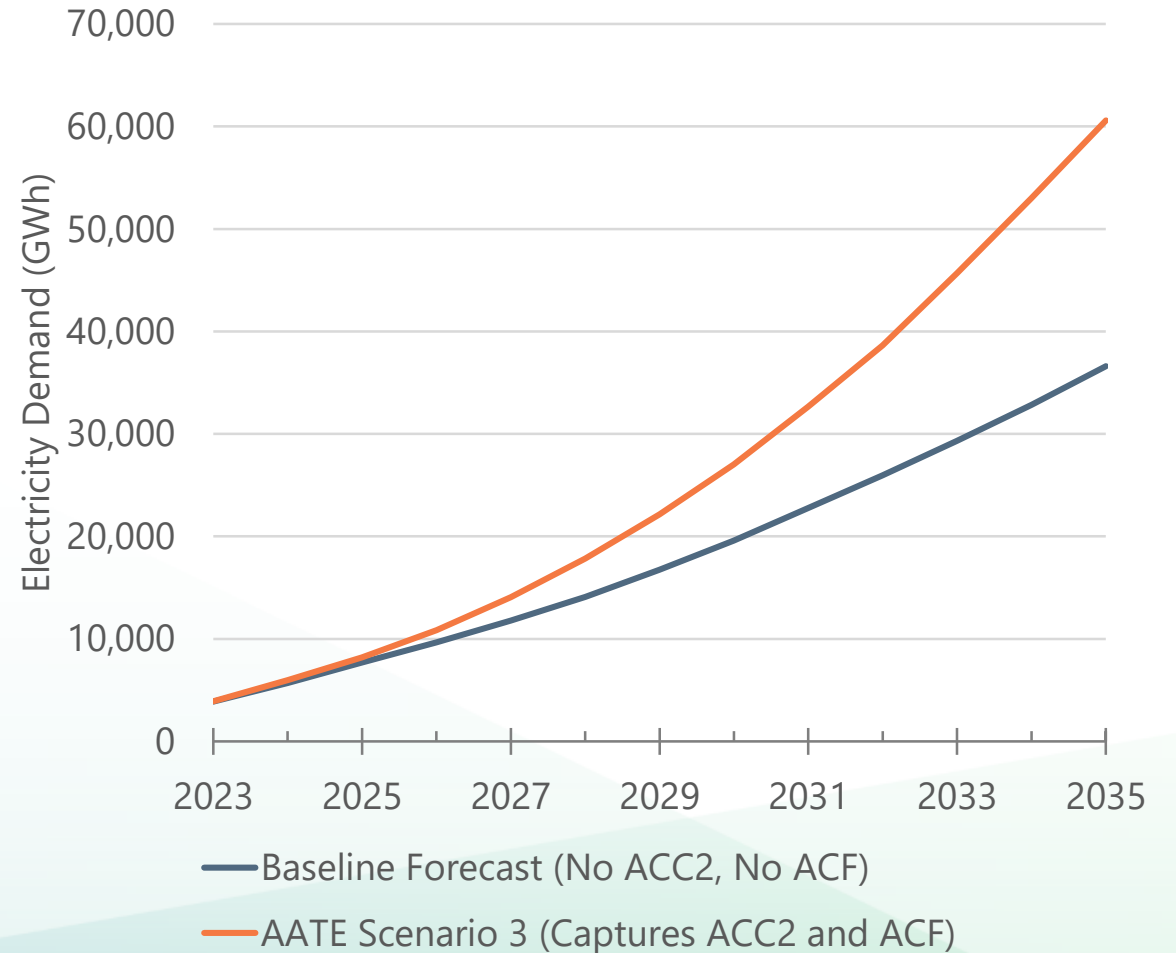


2022 IEPR Transportation Forecast

Plug-In Electric On-Road Vehicles (all classes)

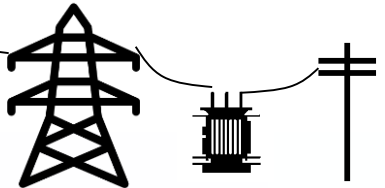
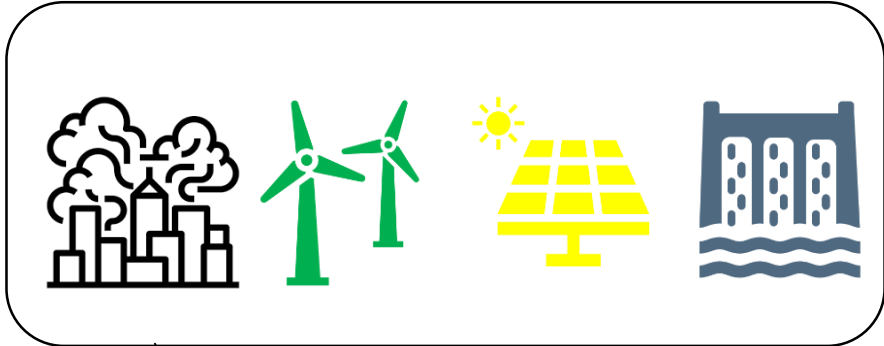


Electricity Demand from On-Road Vehicles





CA Load Flexibility Ecosystem



CEC - Load Management Standards (LMS)
CPUC - California Flexible Unified Signal for Energy (CaFUSE)

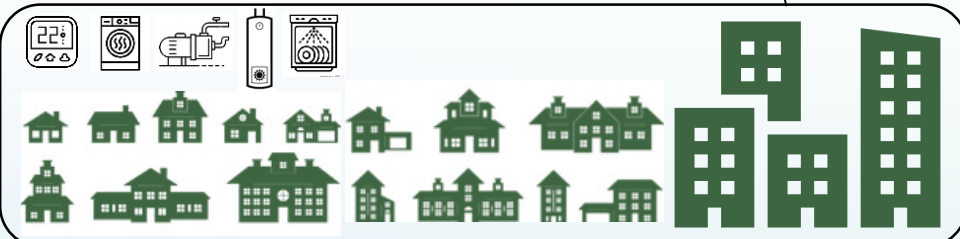


Market Informed Demand Automation Server (MIDAS)

Automation Service Providers



Flexible Demand Appliance Standards (FDAS)





Future Potential – Clean Energy Reliability Investment Plan

- Funding Priorities
 - Enabling Investments
 - Scaling Demand-side Resources
 - Scaling Supply-side Resources
 - Augmenting for Extreme Events





Proposed Funding by Priority

Initiative	2023/24 (\$M)	2024/25 (\$M)	2025/26 (\$M)	Total (\$M)
Enabling Investments	57	5	5	67
• Transmission Planning	2	0	0	2
• Support CBO Engagement	8	5	0	13
• Support CPM	32	0	0	32
• Permitting and Interconnection	15	0	5	20
Scaling Demand-side Clean Resources	0	175	270	445
Scaling Supply-side Clean Resources	0	150	150	300
• Scaling Supply-side Technologies	0	50	100	150
• Long Duration Energy Storage	0	50	0	50
• Innovation Grants	0	50	50	100
Extreme Event Support	33	50	65.4	148.4
• DSGS	20	30	45.4	95.4
• DEBA	13	20	20	53
Administration	10	20	9.6	39.6
	100	400	500	1000