

Kenneth A. Capron - SkyWay by MicroRail
maglev@maine.rr.com - 207-797-7891

	PolyJoule (MIT) Battery	Tesla 4680 Lithium Ion Battery	
	all plastic; organic conductive polymers	metals	
	function like metals	74%	
		more O2 than conventional cars to manufacture	
energy	5x	x	
range	16%y	y	
power	6z	z	
charging time	80% in under 5 minutes	80% in under 35 minutes	
charge cycles	12000	2000-3000	
deployment	easy		
recyclable	95% recycleable polymer base		
cost	\$65/kwh	\$132/kwh 1.5 times less expensive than Li	
	95% recycleable polymer base		
mining		Brine evaporation	
		selective membranes	
		solvent extraction	
		ion absorption	
		lack of water	
discharge	1 MW in 10 seconds	1 MW in 60 seconds	
life span	~50 years	25 years	
miles			
materials	water-based	Li, Co	
	no clean room		
safety	no flammable solvents	battery fires	
	will not become warped or disfigured from overuse		
	can deliver high power peaks over shorter durations		
	allowed on airplanes		
energy density	60 WH/KG	300 WH/KG 5 times bigger	
power string	2.2Mx3.4Mx0.8M=1590KG		
nominal voltage	528v		

voltage range	158v to 972v			
temperature range	-40 to 50celcius			