

IMPACT

Statistical Report on Catastrophic Event

CIANJUR EARTHQUAKE - 21 November 2022

EARTHQUAKE DETAILS

General Information

Seismic Source Zone:
Cimandiri Fault
Date of Event
21 November 2022
13:21:10 Local Time



Magnitude

5.6 M
Depth
10 km
Epicenter
6.84°S; 107.05°E

<https://www.bmkg.go.id/gempabumi/gempabumi-dirasakan.bmkg>



Magnitude

5.6 M_{ww}
Depth
10 km
Epicenter
6.853°S 107.095°E

<https://earthquake.usgs.gov/earthquake/event/page/us7000ir9/execute>



Magnitude

5.5 M_w
Depth
10 km
Epicenter
6.89°S 107.05°E

https://geofon.gfz-potsdam.de/old/eqinfo/event.php?id=gfz2022_wlo

AFFECTED CITIES

as reported by USGS (accessed at <http://earthquake.usgs.gov> - latest update on 21 November 2022 at 13.21 PM Jakarta local time)



CIANJUR EARTHQUAKE - 21 November 2022

An earthquake with magnitude 5.6 M (BMKG) or 5.6M_{ww} (USGS), occurred in Cianjur on Monday afternoon, November 21, 2022. The epicenter of the earthquake was 10 kilometers southwest of Cianjur at a depth of 10 kilometers and occurred at 13.21 WIB. The earthquake impacted as far as ± 300 kilometers radius to the western and central part of Java.

Based on MCM¹ simulation ver. 2.1 (MAIPARK catastrophe modeling), the areas affected with high intensity are Kab. Cianjur (VII MMI), Kab. Bandung Barat and Kab. Sukabumi (VI MMI). Meanwhile, Greater Jakarta were impacted by the earthquake at intensity of III - IV MMI.

According to the MAIPARK database (from the earthquake insurance policy cession), total affected portfolio in the III - VII intensity area is **IDR 1,601 trillion (148,245 risks)**. Majority (> 97%) of these portfolio were expected to experience under-deductible damages. Meanwhile, the other 3% of portfolio (IDR 38.4 trillion with 5,516 risks), which located in the VI - VII intensity area, have a potential minor to moderate damages or claim amount.

¹MCM (MAIPARK Catastrophe Model) Ver. 2.1.

ACCUMULATION SUMMARY - INDONESIA EQ INSURANCE

on-risk as at 21 November 2022

Earthquake intensity (MMI) simulated using Maipark Cat Model (MCM) ver. 2.1

Intensity (MMI)		II	III	IV	V	VI	VII	VIII	IX+
Perceived Shaking		Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
Potential Damage	Resistant Structure	None	None	Very Light	Light	Moderate	Moderate/Heavy	Heavy	Very Heavy
	Vulnerable Structure	None	None	Light	Moderate	Moderate/Heavy	Heavy	Very Heavy	Very Heavy
Number of Risk		~	17,414	105,794	19,521	3,714	1,802	~	~
Total Exposure (billion IDR)		~	181,565.92	838,225.50	543,126.04	33,450.13	4,988.69	~	~

Per Interest (billion IDR)	II	III	IV	V	VI	VII	VIII	IX+
Building	~	78,323.06	378,408.02	155,516.12	19,904.41	1,507.27	~	~
Machinery	~	25,423.27	108,713.61	168,642.31	4,668.33	193.04	~	~
Stock	~	18,625.22	91,441.13	59,980.33	4,665.58	477.03	~	~
Others	~	52,012.38	192,667.09	99,535.25	3,149.92	2,334.14	~	~
Business Interruption	~	7,182.00	66,995.65	59,452.02	1,061.88	477.20	~	~

Per Occupation (billion IDR)	II	III	IV	V	VI	VII	VIII	IX+
Agriculture	~	55.81	217.51	42.73	77.89	88.10	~	~
Commercial	~	15,123.06	246,601.29	70,778.64	2,539.29	759.62	~	~
Industrial	~	161,707.49	335,534.92	453,784.73	30,002.45	3,852.83	~	~
Residential	~	4,679.56	255,871.78	18,519.95	830.50	288.13	~	~

IMPACT-Statistical Report on Catastrophic Event

IMPACT

Statistical Report on Catastrophic Event

Annex 1 - Affected Portfolio per Occupation

Intensity Scale MMI	City / Kabupaten	Number of Risk	Premium (million IDR)	Exposure per Occupation (billion IDR)					
				Agriculture	Commercial	Industrial	Residential	Total	
VII	KAB. CIANJUR	1,802	7,334.29	88.10	759.62	3,852.83	288.13	4,988.69	
VI	KAB. BANDUNG BARAT	1,660	14,845.32	28.23	1,179.32	7,947.84	586.45	9,741.84	
	KAB. SUKABUMI	2,054	36,044.34	49.67	1,359.98	22,054.61	244.04	23,708.30	
V	KAB. BEKASI	7,160	273,565.84	-	35,315.21	231,371.46	8,693.83	275,380.50	
	KAB. BOGOR	7,113	127.30	16.84	14,628.13	70,022.86	2,935.78	87,603.62	
	KAB. KARAWANG	3,499	152.34	-	17,358.84	126,958.30	6,370.38	150,687.51	
	KAB. PURWAKARTA	1,167	41.63	25.89	3,000.62	25,330.46	347.05	28,704.02	
	KOTA SUKABUMI	582	1.47	-	475.85	101.64	172.91	750.40	
IV	KAB. BANDUNG	3,447	24.68	67.49	2,874.49	12,923.35	883.18	16,748.50	
	KAB. CIREBON	1,000	4.16	-	670.06	3,259.34	117.40	4,046.80	
	KAB. GARUT	1,374	6.83	33.07	513.56	3,893.53	182.26	4,622.42	
	KAB. INDRAMAYU	1,121	16.59	-	609.12	10,229.45	100.46	10,939.04	
	KAB. KEPULAUAN SERIBU	38	0.08	-	10.94	-	40.70	51.63	
	KAB. LEBAK	683	2.37	7.10	327.20	1,187.64	57.75	1,579.68	
	KAB. MAJALENGKA	1,136	6.27	-	273.19	5,864.21	82.07	6,219.47	
	KAB. PANDEGLANG	529	10.09	0.52	323.88	6,113.57	114.44	6,552.42	
	KAB. SERANG	1,870	79.77	-	5,504.87	48,965.15	168.39	54,638.41	
	KAB. SUBANG	2,505	11.58	46.36	763.39	4,626.13	215.44	5,651.33	
	KAB. SUMEDANG	1,484	6.06	-	404.40	2,597.79	108.52	3,110.70	
	KAB. TANGERANG	7,791	83.05	-	16,429.30	33,762.69	6,536.45	56,728.44	
	KAB. TASIKMALAYA	397	0.68	5.58	165.69	147.59	148.11	466.97	
	KOTA BANDUNG	8,485	107.73	41.99	15,107.95	10,375.31	21,485.93	47,011.18	
	KOTA BEKASI	5,635	67.55	-	18,651.42	24,619.51	2,686.30	45,957.23	
	KOTA BOGOR	2,064	11.62	2.50	3,588.90	3,549.06	931.85	8,072.31	
	KOTA CIMAHI	708	4.66	-	550.20	1,613.58	299.64	2,463.42	
	KOTA DEPOK	3,040	19.37	-	4,046.00	7,859.59	1,137.67	13,043.26	
	KOTA JAKARTA BARAT	12,585	75.62	-	21,412.49	6,475.39	18,603.90	46,491.78	
	KOTA JAKARTA PUSAT	9,181	180.87	-	42,641.04	5,963.50	64,810.12	113,414.66	
	KOTA JAKARTA SELATAN	13,524	207.44	12.90	33,455.90	5,400.53	90,367.12	129,236.45	
	KOTA JAKARTA TIMUR	5,864	106.40	-	16,857.79	48,374.37	10,007.64	75,239.80	
	KOTA JAKARTA UTARA	9,493	154.82	-	30,371.70	50,960.91	22,783.34	104,115.95	
	KOTA SERANG	790	4.11	-	791.26	1,599.29	410.53	2,801.09	
	KOTA TANGERANG	6,588	87.26	-	21,937.51	33,297.39	5,616.51	60,851.40	
	KOTA TANGERANG SELATAN	4,462	27.41	-	8,319.03	1,876.06	7,976.08	18,171.17	
	III	27 Kota/Kab. Lainnya	17,414	255.45	55.81	15,123.06	161,707.49	4,679.56	181,565.92
		TOTAL	148,245	2,217,020.91	482.04	335,801.91	984,882.42	280,189.91	1,601,356.28

* on risk as at 21 November 2022
Earthquake intensity (MMI) simulated using Maipark Cat Model (MCM) ver. 2.1

IMPACT-Statistical Report on Catastrophic Event

IMPACT

Statistical Report on Catastrophic Event

Annex 2 - Affected Portfolio per Interest

Intensity Scale MMI	City / Kabupaten	Number of Risk	Exposure per Interest (billion IDR)					Total
			Building	Machinery	Stock	Others	BI	
VII	KAB. CIANJUR	1,802	1,507.27	193.04	477.03	2,334.14	477.20	4,988.69
VI	KAB. BANDUNG BARAT	1,660	6,920.44	1,062.56	846.04	692.18	220.63	9,741.84
	KAB. SUKABUMI	2,054	12,983.97	3,605.78	3,819.55	2,457.75	841.25	23,708.30
V	KAB. BEKASI	7,160	68,020.46	85,969.81	37,904.09	47,303.25	36,182.90	275,380.50
	KAB. BOGOR	7,113	42,107.03	15,176.12	8,642.31	15,942.39	5,735.77	87,603.62
	KAB. KARAWANG	3,499	39,497.22	54,702.62	9,722.19	31,674.29	15,091.19	150,687.51
IV	KAB. PURWAKARTA	1,167	5,457.39	12,750.63	3,591.97	4,466.88	2,437.14	28,704.02
	KOTA SUKABUMI	582	434.02	43.13	119.77	148.44	5.03	750.40
	KAB. BANDUNG	3,447	6,179.99	5,977.94	2,180.61	1,755.61	654.34	16,748.50
	KAB. CIREBON	1,000	1,623.30	984.91	776.45	549.41	112.73	4,046.80
	KAB. GARUT	1,374	2,514.65	324.55	317.95	1,338.97	126.30	4,622.42
	KAB. INDRAMAYU	1,121	10,234.74	283.56	135.37	278.87	6.49	10,939.04
	KAB. KEPULAUAN SERIBU	38	41.51	-	-	10.13	-	51.63
	KAB. LEBAK	683	849.87	142.36	249.64	307.57	30.24	1,579.68
	KAB. MAJALENGKA	1,136	1,976.05	3,019.30	583.78	450.01	190.32	6,219.47
	KAB. PANDEGLANG	529	6,251.00	97.28	29.91	174.23	-	6,552.42
	KAB. SERANG	1,870	7,770.42	8,681.23	6,824.24	28,060.66	3,301.86	54,638.41
	KAB. SUBANG	2,505	2,420.91	873.85	1,059.99	940.68	355.90	5,651.33
	KAB. SUMEDANG	1,484	853.33	1,596.65	319.02	268.47	73.24	3,110.70
	KAB. TANGERANG	7,791	26,585.53	10,587.30	10,699.77	7,022.07	1,833.77	56,728.44
	KAB. TASIKMALAYA	397	272.75	51.52	79.65	62.75	0.30	466.97
	KOTA BANDUNG	8,485	33,304.87	1,186.10	5,486.48	6,445.81	587.92	47,011.18
	KOTA BEKASI	5,635	20,862.29	5,328.00	11,237.09	4,392.92	4,136.93	45,957.23
	KOTA BOGOR	2,064	3,346.81	731.65	1,137.45	1,370.54	1,485.86	8,072.31
	KOTA CIMAHI	708	885.62	795.03	514.32	231.59	36.86	2,463.42
	KOTA DEPOK	3,040	3,680.25	3,768.36	2,013.55	2,060.80	1,520.31	13,043.26
	KOTA JAKARTA BARAT	12,585	22,104.31	3,652.21	4,945.37	13,586.60	2,203.29	46,491.78
	KOTA JAKARTA PUSAT	9,181	56,260.99	1,709.80	4,423.49	40,154.47	10,865.90	113,414.66
	KOTA JAKARTA SELATAN	13,524	67,531.05	6,932.38	4,802.95	36,728.59	13,241.48	129,236.45
	KOTA JAKARTA TIMUR	5,864	23,390.17	11,303.11	7,816.58	17,027.10	15,702.84	75,239.80
	KOTA JAKARTA UTARA	9,493	53,740.60	16,614.82	13,987.89	16,363.51	3,409.13	104,115.95
	KOTA SERANG	790	969.66	137.45	356.07	1,145.48	192.44	2,801.09
	KOTA TANGERANG	6,588	16,216.49	22,355.51	9,319.78	7,165.58	5,794.05	60,851.40
	KOTA TANGERANG SELATAN	4,462	8,540.84	1,578.76	2,143.78	4,774.65	1,133.15	18,171.17
III	27 Kota/Kab. Lainnya	17,414	78,323.06	25,423.27	18,625.22	52,012.38	7,182.00	181,565.92
	TOTAL	148,245	633,658.87	307,640.57	175,189.30	349,698.77	135,168.76	1,601,356.28

* on risk as at 21 November 2022

Earthquake intensity (MMI) simulated using Maipark Cat Model (MCM) ver. 2.1

IMPACT-Statistical Report on Catastrophic Event