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Statistical Report on Catastrophic Event

BENGKULU EARTHQUAKE - 17 May 2022

EARTHQUAKE DETAILS

General Information

Seismic Source Zone:
Sumatera Megathrust -
Segment Southern Sumatera
Date of Event
17 May 2022
01:58:22 Local Time



Magnitude
6.0 M
Depth
10.0 km
Epicenter
5.4°S; 101.81°E
<https://www.bmkg.go.id/gempabumi-dirasakan.html>
[bumi/gempabumi-dirasakan.bmkg](https://www.bmkg.go.id/gempabumi-dirasakan.html)



Magnitude
5.8 Mww
Depth
21.4 km
Epicenter
5.260°S; 102.004°E
<https://earthquake.usgs.gov/earthquakes/ventpage/us6000hll/execute>



Magnitude
5.8 Mw
Depth
27.0 km
Epicenter
5.21°S; 102.11°E
<http://geofon.gfz-potsdam.de/eqinfo/event.php?id=gfz2022jocm>

AFFECTED CITIES

as reported by USGS (accessed at <http://earthquake.usgs.gov> - latest update on 17 May 2022 at 03:36 AM Jakarta local time)



BENGKULU EARTHQUAKE - 17 MAY 2022

An earthquake with magnitude **6.0M** (BMKG) or **5.8mww** (USGS), occurred in near Enggano Island, Bengkulu area on Tuesday morning at 01.58 WIB, May 17th, 2022. The epicenter of the earthquake was 160 kilometers Southwest of Bengkulu city at a depth of 10 kilometers. The earthquake resulted from the Sumatera Megathrust activities, in the Southern Sumatera Segment.

From the preliminary data and assessment, it can be estimated the earthquake came from the same seismic source zone of earthquakes in 2000 (7.9Mw) and 2001 (7.4Mw). The most notable major earthquake recorded from this zone is the 9.0M in 1833, which generated a significant tsunami and widely felt in almost all area in the Southern Sumatera (Newcomb and McCann, 1987).

Based on MCM¹ simulation, the maximum intensity is VI MMI. Enggano Island experienced IV - VI intensity (MMI) while Bengkulu city and three other kabupaten in Bengkulu province experienced III intensity (MMI). According to MAIPARK database (from the earthquake insurance policy cession), affected insurance exposure is considerably low. Total affected portfolio in the III - V MMI is only 2,9 trillion rupiah (2,695 risks).

¹MCM (MAIPARK Catastrophe Model) Ver. 2.1.0

ACCUMULATION SUMMARY - INDONESIA EQ INSURANCE on-risk as at 17 May 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		~	2,694	~	1	~	~	~	~
Total Exposure (billion IDR)		~	2,857.56	~	1.91	~	~	~	~
Per Interest (billion IDR)		II	III	IV	V	VI	VII	VIII	IX+
Building		~	1,785.26	~	1.20	~	~	~	~
Machinery		~	242.18	~	0.71	~	~	~	~
Stock		~	518.80	~	~	~	~	~	~
Others		~	277.62	~	~	~	~	~	~
Business Interruption		~	33.70	~	~	~	~	~	~
Per Occupation (billion IDR)		II	III	IV	V	VI	VII	VIII	IX+
Agriculture		~	-	~	~	~	~	~	~
Commercial		~	1,558.17	~	~	~	~	~	~
Industrial		~	724.63	~	~	~	~	~	~
Residential		~	574.77	~	1.91	~	~	~	~

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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
VI	KAB. BENGKULU UTARA (Kec. Enggano)	-	-	-	-	-	-	-
V	KAB. BENGKULU UTARA (Kec. Enggano)	1	3.63	-	-	-	1.91	1.91
IV	KAB. BENGKULU UTARA (Kec. Enggano)	-	-	-	-	-	-	-
III	KAB. BENGKULU SELATAN	296	508.43	-	69.83	221.16	28.05	319.04
	KAB. KAUR	108	702.77	-	20.50	333.00	13.29	366.79
	KAB. SELUMA	116	154.97	-	57.24	20.37	17.88	95.48
	KOTA BENGKULU	2174	5,730.18	-	1,410.60	150.10	515.54	2,076.25
	TOTAL	2,695	7,099.99	0.00	1,558.17	724.63	576.68	2,859.48

* on risk as at 17 May 2022

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

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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	
VI	KAB. BENGKULU UTARA (Kec. Enggano)	-	-	-	-	-	-	-
V	KAB. BENGKULU UTARA (Kec. Enggano)	1	1.20	0.71	-	-	-	1.91
IV	KAB. BENGKULU UTARA (Kec. Enggano)	-	-	-	-	-	-	-
III	KAB. BENGKULU SELATAN	296	111.94	155.25	36.84	15.00	-	319.04
	KAB. KAUR	108	331.61	4.12	7.11	17.61	6.35	366.79
	KAB. SELUMA	116	40.91	1.62	29.39	23.56	-	95.48
	KOTA BENGKULU	2174	1,300.80	81.18	445.46	221.45	27.35	2,076.25
	TOTAL	2,695	1,786.47	242.89	518.80	277.62	33.70	2,859.48

* on risk as at 17 May 2022

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

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