

An Bord Pleanála, 64 Marlborough Street, Dublin 1, D01 V902
Planning Authority: Clare County Council

ABP Case References:

ABP-320705-24 (Knockshanvo Wind Farm & 110kV Substation)

VA03.320727 / ABP-317763 (110kV Grid Connection & Subsurface Cabling)

Developer: FuturEnergy Knockshanvo DAC / FuturEnergy Ireland

Observers: Dr. Jeffrey Buckley & Ms. Jennifer Loughran

Property Address: Sallybank, Kilmore, Clare (Eircode: V94 E3E6)

Date: 4th August 2026

Dear Sir/Madam,

We are writing to submit a formal observation directly responding to the planning statements and response to observations submitted by the applicant, FuturEnergy Knockshanvo DAC (prepared by MKO).

The applicant's reliance on generalized, macro-level desktop models and outdated international literature fails to engage with the acute, site-specific, and structural realities of our residential property. Our home at Eircode V94 E3E6 is an old, traditional ~100-year-old two-storey stone farmhouse with historical footings and no modern cavity-wall insulation. The proposed development imposes an extreme concentration of heavy industrial infrastructure directly around our property and narrow access road, including:

- Four 185m turbines (T5, T6, T8, T9) surrounding our 2-acre plot, with Turbine T6 situated under 1km (~965m–1,032m) from our site boundaries and outbuildings.
- A 110kV electrical substation situated within ~500 meters of our home.
- High-voltage 110kV underground grid cabling slated to be trenched directly along Sallybank Road, flush against our home's external structural walls.

We respectfully urge the Board to refuse planning permission based on the following grounds:

1. Severe Structural Risk & Absence of Vibration Indemnity for a 100-Year-Old Stone House

The Applicant's Position: The developer asserts that grid connection cable trenching along Sallybank Road (L3042) will cause only "temporary and short-term" construction disruptions, committing solely to standard pre- and post-construction road surface surveys for the local authority.

Counter-Rebuttal:

Our home is a historic stone masonry structure. Unlike modern houses built on reinforced concrete strip or raft foundations, traditional stone buildings feature shallow, rigid footings that are uniquely susceptible to ground vibration, shear stress, masonry slip, and structural cracking.

As the side wall of our house forms the direct boundary line flush with Sallybank Road, heavy industrial rock-breaking, excavation, and deep trenching will occur in very close proximity to our home's primary load-bearing walls.

While MKO promises to restore the public road tarmac for Clare County Council, they have provided zero localized structural engineering assessments, zero baseline structural surveys, no vibration monitoring protocols, and no structural indemnity framework to protect our home against catastrophic cracking or subsidence.

2. Impassable Road Blockade, Emergency Isolation, and Uncontrolled Substation Access Traffic

The Applicant's Position: The developer claims that Traffic Management Plans (TMPs) and flagger operations will maintain continuous local access along Sallybank Road, deferring operational details to post-consent agreements.

Counter-Rebuttal:

Sallybank Road (L3042) is a highly constrained, narrow country lane where two passenger cars cannot consistently pass. Digging an open high-voltage trench while operating heavy industrial plant machinery will physically consume the entire road width outside our gate. The developer has provided no engineering methodology proving how a passable lane can be physically maintained. This layout cuts off our right of way, trapping us inside our property or barring access home, particularly when works are ongoing outside of our property.

Furthermore, as raised in our original submission, we reject the applicant's unfounded assertion that subsurface cable trenching along Sallybank Road (L3042) will progress seamlessly at 100 meters per day to complete in "one month". The applicant's response document provides zero technical or engineering methodology to substantiate this rate of progress along a narrow, constrained country lane. Given that our property sits 3 km along this single-lane corridor, the developer's reliance on generalized post-consent Traffic Management Plans (TMPs) fails to address real-world construction delays, physical road blockades, or how daily residential and emergency access will be physically guaranteed over what will inevitably be a far more prolonged and disruptive timeframe.

Furthermore, in Drawing 200513 - 06, the applicant indicates a "Proposed New Link Road To Facilitate The Delivery Of Large Turbine Components and Other Abnormal Loads" to the substation. However, the proposed 110kV substation site features both an entry and an exit road. While abnormal loads may be forced to use the new link road, general construction traffic, light commercial delivery vehicles, commuting site workers, and post-construction maintenance personnel accessing the substation will not be constrained to it. It is convenient and highly probable that traffic will spill over onto Sallybank Road. Our road is narrow, fragile, and in poor repair; the applicant provides zero guarantees or enforcement mechanisms to prevent substation personnel and non-abnormal traffic from using Sallybank Road, accelerating its physical destruction and exacerbating daily residential disturbance.

3. Defective Noise Baseline: Work-From-Home Omission & Continuous 24/7 Substation Tonal Hum

The Applicant's Position: MKO and AWN Consulting assert compliance with ETSU-R-97 and the 2006 Wind Energy Development Guidelines (WEGs), arguing that daytime operational noise meets derived limits.

Counter-Rebuttal:

The applicant's noise survey at our property (Location D / H491) relied strictly on ETSU-R-97 "quiet periods," explicitly excluding standard weekday working hours (07:00–18:00 Mon–Fri, 07:00–13:00 Sat). As remote workers working full-time from home, unmeasured daytime operational noise poses a direct, unassessed threat to our daily work environment.

ETSU-R-97 assumes standard noise reduction through modern building envelopes. Our ~100-year-old stone home has limited sound dampening capabilities compared to modern insulated cavity structures.

The applicant focuses almost exclusively on wind-dependent aerodynamic turbine noise, minimizing the static operational noise of the 110kV substation located ~500m from our home. Electrical substations emit an unbroken, low-frequency 100Hz tonal hum operating 24 hours a day, 365 days a year, entirely independent of wind speed. In our quiet rural setting with low ambient night-time noise, this low-frequency hum easily penetrates stone walls and double glazing, risking chronic sleep deprivation.

Surrounded by four 185m turbines (T6 at ~965m–1,032m, T8 at ~1,113m, T9 at ~1,209m, T5 at ~1,459m), our home and 2-acre plot bear direct line-of-sight exposure to rhythmic aerodynamic thumping (Amplitude Modulation) from multiple angles, which is masked by mathematical averaging (L_{A90}).

4. Property Value Wipeout: Systematic Flaws in Cited International Literature vs. Contemporary Irish Empirical Evidence

The Applicant's Position: MKO dismisses property devaluation concerns in Section 3.1.15 by citing international literature, specifically US Department of Energy studies (*Hoen et al., 2009; Hoen et al., 2013*), an industry trade report (*CEBR, 2014*), and a Scottish report (*Heblich et al., 2016*), claiming there is "no statistical evidence that home prices near wind turbines were affected".

Rebuttal & Methodological Critique of the Four Cited Studies:

We categorically reject the applicant's reliance on these four studies. A critical examination reveals that every single international study cited by MKO suffers from severe sample scarcity or arbitrary distance-pooling that systematically conceals sub-1km devaluation:

CEBR (2014): Complete Exclusion of the <2km Impact Zone. This report, commissioned by wind industry lobby body RenewableUK, is fundamentally defective. CEBR explicitly confessed in their report that there were too few sales within 1km and 2km to construct a reliable dataset, stating: "*Over a 19-year period there were, on average, just 68 transactions within 1km, and 723 transactions within 2km... It was therefore only possible to use data for the 5km area.*" CEBR averaged property prices across a 5km radius, completely diluting acute sub-1km price hits. Furthermore, independent research by the London School of Economics (*Gibbons, 2014/2015*) analysing UK transactions proved that visible wind farms reduce nearby home prices by 5% to 15%, with a 12% price drop inside 2km.

Heblich et al. (2016 / ClimateXChange): Arbitrary 0–2km Distance Banding. As highlighted in our original submission, this Scottish study groups all properties between 0km and 2km into a single 2,000-meter band, whereas outer distances are evaluated in 1km increments. Because setback guidelines mean very few homes exist within <1km, combining homes 1.5km–2km

away with homes situated <1km from turbines mathematically washes out sub-1km drop-offs. Moreover, Key Finding #2 explicitly notes that "*results vary across different regions of Scotland*" (p. 3) and records negative price impacts for visible sub-100m turbines.

Hoen et al. (2009, 2013 / LBNL): Data Scarcity & Published Margins of Error.

Hoen et al. (2009) contained only 67 post-construction sales inside 3,000 feet (~914m) across the entire United States (~2.7 sales per site). The authors explicitly note that their model *cannot rule out negative impacts on individual homes* (p. iii) and recorded an unadjusted -5.3% to -5.5% price reduction within 1 mile (p. 32).

Hoen et al. (2013) contained only 104 post-construction sales inside 0.5 miles across 67 wind facilities (~1.5 sales per site). Crucially, the authors explicitly state in their conclusion that due to sample limitations, their model cannot rule out an average property value reduction of up to -9.0% for homes within a half mile (p. 38).

The cited US, UK, and Scottish studies evaluated legacy wind projects built between 1990 and 2014, featuring small turbines (60m–118m total height). Applying these findings to Knockshanvo, which proposes massive 185-meter tip-height turbines, is methodologically invalid. Furthermore, these macro-studies evaluated turbines in isolation on agricultural plots; they provide zero empirical baseline for a traditional ~100-year-old stone farmhouse situated on a narrow rural road, subjected to a unique, highly targeted combination of encumbrances: four 185m turbines surrounding the plot at ~965m–1,459m, an active 110kV substation within 500m, and a high-voltage underground cable trench excavated inches from unreinforced stone walls.

Direct Counter-Evidence from Irish West-Coast Market Data:

MKO systematically ignores contemporary, peer-reviewed Irish econometric research directly applicable to County Clare. *Gillespie & McHale (2023, Centre for Economic Research on Inclusivity and Sustainability, University of Galway)* analysed 64,163 residential property transactions across 7 Irish west-coast counties between 2016 and 2021. By specifically isolating fine-grained distance bands, their empirical analysis demonstrated:

A statistically significant 14.7% to 20.4% reduction in property values for homes located within 1 km of a wind turbine, and that turbine height acts as a significant additive devaluation factor.

Taking into account our 2-acre plot boundaries (~45m x 130m), our residential curtilage sits directly within this scientifically proven <1km devaluation zone relative to Turbine T6 (~965m–1,032m). Forcing the combined infrastructural burden of four 185m turbines, a 110kV substation, and deep cable trenching onto an individual roadside home inflicts direct, unmitigated financial injury and severely infringes upon our constitutional right to the peaceful enjoyment of our property.

5. Procedural Unfairness & Deficiencies in Public Consultation

The Applicant's Position: MKO's Community Consultation Report asserts that a transparent door-to-door community engagement programme was executed by appointed Community Liaison Officers (CLOs).

Counter-Rebuttal:

While developer representatives visited us regarding general wind farm elements, they entirely omitted and failed to disclose that a 110kV electrical substation would be positioned within ~500m of our family home, utilising our narrow access road.

Deliberately withholding the exact location of heavy electrical infrastructure during direct face-to-face consultation denied us the statutory opportunity to engage in meaningful pre-planning dialogue or request early-stage layout modifications. This invalidates the developer's claims of transparent public consultation.

6. Ecological Disturbance: Lack of Actionable Pine Marten Protocols

The Applicant's Position: MKO states in Section 3.1.6.5 that pre-construction surveys will be undertaken for protected fauna and argues that turbine blade feathering and the Biodiversity Management Plan mitigate ecological risks.

Counter-Rebuttal:

We provided photographic evidence of a native Pine Marten at our property (May 2024). While MKO agrees to pre-commencement surveys, they fail to outline actionable, step-by-step protocols (e.g., mandatory exclusion zones, operational stoppages, or derogation licensing under the Irish Wildlife Acts) should active dens be encountered during felling or trenching.

Digging the high-voltage trench directly along Sallybank Road necessitates root cutting and mature vegetation removal along roadside hedgerows and treelines. These established boundaries serve as critical linear foraging corridors for protected Pine Martens and bat species (including the Lesser Horseshoe Bat).

Conclusion

The proposed Knockshanvo Wind Farm and Grid Connection layout is completely disproportionate. It forces the combined infrastructural burden of an entire industrial project, four 185m turbines, a 110kV substation, and deep cable trenching, directly onto a single-lane country road and a single, structurally vulnerable historic residential property.

We strongly urge An Bord Pleanála to protect local residents from this layout and refuse planning permission for both applications (ABP-320705-24 and VA03.320727 / ABP-317763).

Yours faithfully,

Dr. Jeffrey Buckley & Mrs. Jennifer Loughran